

CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

A

CBO

S T U D Y

DECEMBER 1998

Regulatory
Takings and
Proposals for
Change



19990111 033

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

REGULATORY TAKINGS AND PROPOSALS FOR CHANGE

The Congress of the United States
Congressional Budget Office

NOTES

The numbers in the text and tables of this study may not add up to totals because of rounding.

Cover photos courtesy of the Fish and Wildlife Service and Kay Hager.

Preface

The takings clause of the Fifth Amendment to the U.S. Constitution states "nor shall private property be taken for public use, without just compensation." Some Members of Congress believe that the enforcement of this requirement is inadequate and that statutory measures are needed to both reduce the infringement of private property rights resulting from government regulation and ensure compensation in the event of such infringement. A variety of legislation has been proposed in recent sessions of Congress to achieve those goals. This study examines those proposals and their possible consequences. The Congressional Budget Office (CBO) prepared it at the request of Senator John Glenn, Ranking Minority Member of the Committee on Governmental Affairs. In accordance with CBO's mandate to provide objective and impartial analysis, the study contains no recommendations.

Robert Hunt, formerly of CBO, and Timothy VandenBerg of CBO's Natural Resources and Commerce Division wrote the study under the supervision of Jan Paul Acton and Roger Hitchner. The authors would like to thank Gail Del Balzo, Pete Fontaine, Tim Lasocki, Paul Menchik, Deborah Clay-Mendez, Carl Muehlmann, Beth Pinkston, Deborah Reis, Jennifer Smith, Elliot Schwartz, Anne Toohey, and David Torregrosa, all of CBO, for their valuable assistance. The study also benefited from the contributions of many people outside CBO. Among them were Timothy Dowling, James Eaton, William Fischel, Ralph Heimlich, David Lampen, Eric Olson, Joseph Sax, Keith Weibe, and Lance Wood. Special thanks are owed to Robert Meltz for his valuable comments on the legal and jurisdictional issues surrounding regulatory takings.

Leah Mazade edited the manuscript, and Chris Spoor proofread it. Rae Wiseman typed the many drafts. Kathryn Quattrone prepared the study for publication, and Laurie Brown prepared the electronic versions for CBO's World Wide Web site.

June E. O'Neill
Director

December 1998

This study and other CBO publications
are available at CBO's Web site:
<http://www.cbo.gov/>

Contents

	SUMMARY	ix
ONE	INTRODUCTION	1
	What Is a Regulatory Taking? 1	
	Wetlands Regulation 2	
	Takings Claims Against the Federal Government 6	
TWO	REGULATORY TAKINGS: THE STATUS QUO	13
	How the Courts Evaluate Regulatory Takings Claims 13	
	Jurisdiction: Where and When Are Takings	
	Claims Filed? 16	
	Criticisms of the Status Quo 18	
	Proposals for Change 20	
THREE	INCREASING ACCESS TO COMPENSATION	21
	Adopting a Reduction-in-Value Threshold Criterion 21	
	Computing Reductions in Property Value Under	
	the Proposals 27	
	The Fairness of Proposed Reduction-in-Value	
	Thresholds 31	
	The Nuisance Exception to Compensation 33	
	Expanding the Bundle of Rights Eligible for	
	Compensation 35	
FOUR	INCREASING ACCESS TO FEDERAL COURTS AND ENCOURAGING SETTLEMENTS	37
	Easing Ripeness Requirements 37	
	Modifying the Jurisdiction of Federal Courts 40	
	Encouraging the Settlement of Compensation	
	Claims 41	

FIVE	AUGMENTING REQUIREMENTS FOR AGENCY TAKINGS ANALYSES	45
	Takings Analysis in the Present System	45
	Proposed Modifications to the Takings Analysis Process	47
SIX	PAYING COMPENSATION AWARDS FROM AGENCY BUDGETS	53
	The Current System for Paying Compensation Awards	53
	The Rationale for New Incentives	54
	Paying Compensation Awards from Annual Appropriations	55
	Could Agencies Change Their Regulatory Behavior?	57
	The Role of the Congress	59
SEVEN	ESTIMATING THE COST OF EXPANDING ELIGIBILITY FOR COMPENSATION	61
	Calculating the Change in Compensation Awards	62
	Estimates of Compensation Awards from the Property Rights Debate	66
	Illustrations of the Variation in Estimates of Property Value Losses Caused by Wetlands Regulation	69

TABLES

1.	Selected Takings Claims Pending Against the United States, by Regulatory Program or Type of Regulation, 1997	7
2.	Outcome of Takings Claims in the U.S. Court of Federal Claims, Fiscal Years 1992-1997	8
3.	Takings Claims Handled by the U.S. Court of Federal Claims, by Department or Agency, Fiscal Years 1992-1997	9
4.	Wetlands Converted to Agricultural Uses, Urban Development, and Other Development, 1954-1995	71
5.	Estimated Reductions in Property Values, by Selected Declines in the Wetlands Conversion Rate Because of Federal Restrictions	73
6.	Estimated Reductions in Property Values, by Selected Shares of the Decline in the Wetlands Conversion Rate That Are Attributable to Federal Restrictions	74

FIGURES

1.	Average Annual Net Loss of Wetlands, 1954-1992	5
2.	Takings Cases in the U.S. Court of Federal Claims at the End of the Fiscal Year, 1992-1997	6
3.	Changes in the Value of a Property Caused by a Regulatory Program	26
4.	Illustrative Comparison of Compensation Awards Under the Courts' Jurisprudence and Under Proposed Statutory Eligibility Criteria	63

BOXES

1.	A \$200 Million Taking—The Claim of Whitney Benefits, Inc.	10
2.	The Diversity of Government Actions That Have Led to Successful Takings Claims	11
3.	What Is the "Fair Market Value" of a Property?	22
4.	Choosing a Reduction-in-Value Threshold	23
5.	<i>Florida Rock Industries, Inc. v. United States</i>	30
6.	Assumptions for CBO's Illustrative Estimates	72

Summary

The Fifth Amendment to the U.S. Constitution prohibits the government from taking private property for public use without paying the owner just compensation. That requirement and its application are relatively straightforward when the government formally condemns privately owned land—for example, to build a road. But the issue becomes much more complex when owners allege that the government's regulations have effectively taken their property—by restricting the ways in which they can use it—and that they should be compensated. Only infrequently do courts identify the effect of a regulation on private property as a "taking"—specifically, a "regulatory taking"—that requires compensation under the Fifth Amendment.

At present, when a government's action limits the use of private property, owners find it quite difficult to claim that a regulatory taking has occurred and to sue successfully for compensation. The reasons are two-fold. First, property owners may face many barriers to getting their claims heard and decided by a court. To ensure that they have sufficient information with which to decide cases, the courts require property owners to meet certain minimum requirements before they will consider the merits of the claims. Meeting those requirements can be costly and time-consuming.

Second, takings claims that do reach the courts are decided on the basis of constitutional takings jurisprudence that is generally tolerant of many actions by government that further legitimate public policy goals. (Constitutional takings jurisprudence is the legal rea-

soning on the topic that has been established over the years, predominantly through Supreme Court decisions.) Nevertheless, some property owners sue the government and win regulatory takings cases, and the courts have awarded them several hundred million dollars in compensation in recent years.

The debate over the appropriate role of the federal government has focused attention on the government's regulatory actions. Some people have voiced dissatisfaction with the current level of protection for private property rights, particularly rights associated with real property such as land. They argue that the process for getting takings claims heard in court is too arduous. They also maintain that even if a case is heard, the conclusion of no taking that is typically the outcome is unfair because property owners alone are bearing the burden of regulations that generate benefits for all of society. Property rights advocates contend that the government fails to adequately consider the magnitude and distribution of that burden during decisionmaking because it rarely bears the costs of regulation. In addition, it tends to overregulate—imposing restrictions beyond the point at which the additional benefits of more regulation are at least as great as the additional costs.

The concerns of property rights advocates have resulted in a number of proposals for changing the current approach to regulatory takings. Legislation considered by the Congress over the past several years has incorporated some of the proposed modifications, which can be grouped in four general categories:

- o Relaxing procedural requirements that must be satisfied before a federal court will hear the merits of a taking claim;
- o Creating a new statutory right (that is, one enacted into law) that would entitle property owners to compensation for reductions in the value of their property caused by federal regulatory actions—provided that the owners have satisfied legislatively defined criteria for eligibility;
- o Increasing the requirements for analysis and reporting that federal agencies must meet before making decisions that could restrict the uses of privately owned property; and
- o Specifying that the budget of the agency whose action triggers a regulatory compensation claim be the source of any compensation awarded under the statutory proposals.

Critics argue that such proposals would undermine federal regulatory programs, especially programs that protect the environment, because maintaining existing levels of regulatory protection would become too expensive if the Congress defined eligibility for regulatory compensation broadly. In addition, opponents disagree with claims by property rights advocates that federal regulations cause frequent and severe reductions in property values, in part because such critics maintain that property owners do not possess inherent rights to use their property in ways that might harm the environment. If problems do exist, the opponents of the proposals argue, it would be better to address them through targeted Congressional oversight and changes to specific underlying laws rather than through sweeping, "one-size-fits-all" legislative action.

This Congressional Budget Office (CBO) study describes the current system for handling claims of regulatory takings, focusing on real property, such as land and buildings, rather than other forms of property, such as contracts. It also analyzes the effects of the various proposals for changing that system and presents an illustrative exercise for estimating the costs of such changes. The study reached seven general conclusions:

1. The criteria to qualify for regulatory compensation under the various legislative proposals

- would be easier to satisfy than the implicit criteria of current law, and as a result, more property owners would qualify for compensation. However, some property owners might be overcompensated unless the proposed eligibility criteria took into account that the price at which a property was bought might reflect a discount stemming from the risk or the actual incidence of the regulation for which the owner was seeking compensation.
2. Precisely estimating the reductions in property values caused by federal regulation is often difficult. As a result, the eligibility criteria for compensation based on reductions in property values are vulnerable to uncertainty and possible manipulation. That vulnerability might lead to controversy and large expenditures on appraisals.
 3. Changes in the procedures for handling regulatory compensation claims against the federal government are unlikely to have a significant effect on the frequency and outcome of takings litigation.
 4. Takings claims against state or local governments are sometimes decided in federal courts, but procedural barriers can limit the number of such suits. Reducing those barriers could divert many state- and local-level claims from state courts to federal ones.
 5. Federal agencies currently evaluate whether their proposed regulatory actions would cause takings, but the level of resources needed to meet their obligations is minimal. Additional efforts and resources would improve the quality of those analyses, but in most cases the results would remain qualitative. Making the analyses available to the public would increase awareness of regulatory burdens but could create an incentive for agencies to bias their findings. Judicial review of the analyses might encourage agencies to improve their work, but it could also create new opportunities for litigation and delay.
 6. Paying regulatory compensation from agencies' budgets would discourage activities that were likely to cause compensation awards, but limits on agency discretion in the form of authorizing

legislation and other restrictions could make some awards unavoidable. If those awards were sizable, the Congress would need to decide how and when they would be paid. It would also have to decide whether to cut back the activities that gave rise to the awards.

7. Estimating the long-run cost of regulatory compensation that would result from statutory eligibility criteria is extremely difficult. As a result, such estimates vary dramatically. Credible projections of costs require detailed information about the effects of federal regulatory programs on property values and reliable predictions of the responses of property owners and federal agencies. Neither is readily available.

Relaxing Procedural Requirements and Increasing Access to Federal Courts

At present, courts are usually unwilling to decide a taking claim unless the claim is "ripe" for judgment. In other words, the case must involve a final action by a regulatory agency in which the agency applies the regulation in question to a specific property—and with clear consequences. Reaching that point of final action may require several preceding steps. For example, a property owner may have to apply several times for a permit for a project before learning what land uses the agency will allow. In addition, the owner may have to pursue all available opportunities for an administrative appeal of an adverse decision by the agency or possible waivers of the regulation (in the case of the particular piece of property) before the courts will agree to hear the claim. Those activities can be both costly and time-consuming. The burden of expense and delay is especially weighty for challenges of state and local land-use regulations that property owners bring to the federal courts. It is relatively less severe for challenges of federal actions in federal courts.

Some of the legislative proposals for changing the current approach to regulatory takings would ease the difficulty of getting a claim heard in federal court.

Under certain provisions, a claim would be ready to be decided after a property owner had submitted one "meaningful" application and pursued one appeal of an agency's unfavorable decision. Some proposals would also lift the requirement for an appeal if the appeal was unlikely to succeed. Relaxing the requirements associated with judicial ripeness might cut down some of the delay in getting a decision on the merits of a claim for regulatory compensation, but it might also put federal courts in the position of deciding cases on the basis of incomplete information. In such an instance, the property owner might lose the lawsuit because the court might conclude that the burden of proof that the property owner was required to demonstrate had not been met.

Some provisions in the property rights bills deal with which court or courts have jurisdiction over claims. At present, for all but the smallest cases involving the federal government, a property owner must file a claim for compensation in the U.S. Court of Federal Claims. However, to obtain "injunctive relief"—that is, to overturn the regulatory action that prompted the claim—the owner must file a separate suit in a federal district court. A decision on the owner's compensation claim may have to wait until the other case is decided. Some of the property rights proposals would modify the jurisdiction of the federal courts so that the property owner could pursue both suits in a single court. They would also remove any limitation that might prevent the U.S. Court of Federal Claims from deciding a compensation claim while a related suit was pending in another federal court. The effect of such changes is uncertain because the extent of the procedural hurdle is unclear.

Many regulatory takings cases involve property owners who are suing a state or local government over land-use restrictions (for example, zoning ordinances). Ordinarily, those cases are litigated in state courts under the takings clauses contained in state constitutions and do not involve the federal government at all. Sometimes, however, property owners choose to sue a state or local government in a federal district court rather than in a state court. In such cases, the property owner alleges that a state or local authority is violating the owner's federal constitutional rights—that is, the Fifth Amendment. The courts often dismiss those cases without deciding the merits of the claim, for one of two reasons. First, federal courts might abstain

from deciding such claims if the decision required them to make determinations concerning state property law. Second, federal courts might dismiss the cases on ripeness grounds—for example, if the property owner had not first sought and been denied compensation from the state.

Some proposals would relax the requirements that property owners must satisfy to establish the ripeness of claims against state or local governments that are filed in federal courts. In addition to the limitations on applications and appeals described earlier, those proposals would ensure that property owners were not required to seek compensation from a state before having a claim decided in a federal court. Moreover, some proposals would limit the discretion of federal courts to abstain from deciding those cases.

The procedural changes that some proposals call for would increase the attractiveness of the federal courts as a venue for pursuing takings claims against state and local governments. Yet there is no reason to believe that federal courts would alter the way they applied the constitutional takings jurisprudence in those cases. Consequently, many of those claims would probably fail.

Establishing a Statutory Right to Compensation

Some of the legislative proposals would establish a new right for property owners: the right to compensation from the federal government when its actions reduced the value of their property (subject to certain exceptions). That kind of statutory regime would augment, not replace, takings claims based on the courts' interpretation of the Fifth Amendment. Thus, property owners could still pursue compensation under the Fifth Amendment's takings clause; however, they would probably opt to pursue a claim under the proposed statutory regime because the eligibility criteria for compensation would be easier to satisfy.

A distinct difference between the compensation regime found in many legislative proposals and the constitutional takings jurisprudence that the courts apply involves the use of an explicit "reduction-in-value" test to determine eligibility for compensation. Under the statutory regime, the government, in certain circumstances, would owe compensation to a property owner if the government's regulatory action reduced a property's value by more than a threshold percentage. Depending on the proposal, the reduction-in-value threshold ranges from 10 percent to 50 percent.

In contrast to the constitutional takings jurisprudence, the proposals would calculate percentage reductions in value not on the whole property but only on the portion that was affected by a restriction. (That approach tends to increase the percentage reduction in value that the calculation produces.) Although the courts' jurisprudence considers reductions in a property's value, it identifies no explicit threshold at which compensation is required. Indeed, regulations that appear to result in significant reductions in the value of a property are often not takings because courts give more consideration to other factors (such as the harm that the regulation prevents or the fact that at the time of purchase, the buyer was aware of the potential for regulation).

Another distinguishing feature of many of the property rights proposals is the narrower range of regulatory actions that they exempt from eligibility for compensation. Under some proposals, property owners who saw the value of their property diminished by a regulatory action below a certain compensation eligibility threshold would nevertheless be ineligible for compensation if the regulatory action abated a "nuisance," as defined by state law. That exemption from compensation eligibility is narrower than the one that the courts now apply. At present, a court may deny a claim for compensation if it concludes that there is no taking (on the basis of an ad hoc analysis that balances several factors) or if a regulatory action abates a nuisance. Under constitutional takings jurisprudence, the courts have denied compensation for severe regulatory actions that further legitimate public purposes but do not necessarily abate a nuisance.

Fairness and the Proposed Eligibility Criteria for Regulatory Compensation

As noted earlier, some people believe that government regulations impose unfair burdens on the owners of private property. Proponents of new standards are thus motivated in part by a desire to spread the cost of regulatory burdens more evenly among the citizenry. To people who believe that regulations wrongly force certain property owners to bear the cost of providing benefits that are enjoyed by society as a whole, such a change makes things fairer. But other people argue that government restrictions prevent certain property owners from imposing harm or costs (such as pollution) on others and that property rights proposals would result in paying polluters not to pollute. The distinction between regulatory actions that prevent harm (and should arguably not trigger compensation of property owners for their losses) and those that confer benefits (and should arguably trigger compensation) in many instances is highly subjective. Not surprisingly, substantial disagreement frequently arises over what rights a property owner enjoys and whether property owners should receive compensation when the government infringes on those rights.

In addition to the often divisive issue of who deserves compensation is the matter of whether property rights proposals would result in the appropriate amount of compensation for property owners who were found to be eligible for it. The relaxed eligibility criteria for compensation that some proposals contain would result in more payments to property owners than occur today. But the proposed new system also carries the risk that some property owners would be overcompensated—at least during the transition from the old to the new system.

That problem arises because the prices at which properties were bought and sold in recent decades may reflect information about the restrictions that were imposed on the uses of the property as well as the risk of future restrictions. If a property was sold after a regulatory program had been imposed, its sale price might include a discount that reflected the risk or perhaps the certainty of restrictions on the way it might be used. That discount would cause the seller of the property to be worse off. In contrast, the new property owner—provided that he or she paid an adequately discounted

price—would not be harmed by the regulation because he or she was implicitly compensated for the regulation's effect through a lower purchase price. Unless compensation proposals explicitly considered that phenomenon, they might overcompensate some property owners.

The problem of overcompensation is not insurmountable; indeed, the courts' takings jurisprudence has addressed that issue. Courts are unlikely to decide a Fifth Amendment taking claim in favor of the property owner if he or she should have reasonably anticipated a restriction and that risk was reflected in the purchase price. If that type of eligibility criterion was retained under the proposals, the chance of inappropriate compensation would be reduced. But that refinement has its costs. Assessing such a criterion would add considerably to the complexity of identifying property owners who were eligible for compensation.

Explicitly incorporating a consideration of property owners' expectations into statutory eligibility criteria for compensation would significantly reduce the number of property owners who qualified for compensation, relative to a set of criteria without that factor. The federal regulatory programs that are often alleged to infringe on property rights, such as those related to clean water and endangered species, were initiated over 25 years ago. Arguably, anyone who bought property since then (potentially a large number of current property owners) should have known, to varying extents, that the property was or might be subject to regulation. Many of those owners may have bought their property at a discount that reflected the incidence or risk of federal regulation. Under a set of statutory eligibility criteria that considered expectations, a number of those property owners would be ineligible for compensation.

Feasibility of the Proposed Eligibility Criteria for Regulatory Compensation

Critics of the status quo in the area of property rights argue that using an explicit reduction-in-value test to identify property owners who are eligible for compensation would be an improvement over the ambiguity of the constitutional takings jurisprudence. That argument is plausible in cases in which the drop in the

value of the property that a government's restriction causes can be quantified relatively precisely and with minimal cost and controversy. Yet such estimates in many instances may meet none of those standards.

In the present regime, changes in a property's value are only one of many factors that a court considers in a taking case. Unless the reduction in the value of the property is clearly dramatic in percentage terms, the court does not usually estimate the amount, and the loss is not the deciding factor in the court's decision. But under the criteria proposed in the various property rights bills, relatively small reductions in value could decide eligibility for compensation. The increased importance of estimated reductions in value under the proposals, combined with potentially large areas of uncertainty in those estimates, may encourage property owners and the government to spend considerably more on appraisals than they do now.

The reliability of property valuations and the potential for disputes will vary depending on property type. If the type of property involved in a compensation claim is relatively homogeneous and changes hands frequently—such as residential property—disputes about its value between litigants and their appraisers could be minor. However, if the type of property is heterogeneous and changes hands infrequently—such as undeveloped property—then disputes between the various parties could be considerable. Because disagreements about property rights in many instances concern undeveloped property, the potential for controversy regarding property valuation under statutory eligibility criteria is significant.

Encouraging the Settlement of Compensation Claims

Litigating a regulatory taking claim is generally expensive and time-consuming, factors that affect both the claimant and the government. The potential expense may discourage some property owners from filing legitimate claims, and the lengthy process is a drain on the government's and property owners' resources. One way to reduce those costs and delays is to resolve allegations of undue infringement on property rights without going to court. To that end, some proposals include provisions to encourage out-of-court

settlements and other forms of dispute resolution, such as establishing appeals processes for certain regulatory programs, promoting the use of alternative dispute resolution techniques, and giving property owners the option of forcing the government into binding arbitration.

Under the present system, property owners' takings claims against the government usually fail. But if relaxed eligibility criteria for compensation and other, procedural changes were adopted, the chances that property owners would prevail might increase. That prospect might strengthen the government's incentive to resolve claims outside the courts and could boost the generosity of its settlement offers. Yet the very improvement in the likelihood of property owners' winning their lawsuits in a trial might encourage some of them to reject such offers. In the end, the proportion of cases that were successfully resolved before trial would depend in part on the predictability of trial outcomes. At least during the initial years of a new compensation system, uncertainty over trial outcomes might increase, which could contribute to additional trials in the short run if not over the long term.

Increasing Agencies' Analysis and Reporting Requirements

Federal agencies are in many cases aware of the implications of regulatory behavior for owners of property, but those considerations are usually not central in their decisionmaking. That lack of focus on the potential for a taking is not surprising. Because very few regulatory actions qualify as takings, agencies have had little need to direct resources or attention toward the issue. People who advocate changing the current approach to takings want to require regulatory agencies to consider more fully how their proposed actions could affect property rights and values. Toward that goal, some legislative proposals would build on an existing requirement that agencies analyze the potential effect of regulation on the use of private property.

For over a decade, an executive order has been in place that requires executive branch agencies to prepare "taking implications assessments" of any of their proposed regulatory actions that are likely to affect

property rights. The analyses must include an assessment of whether a proposed action might be a taking of private property, a rough estimate of the compensation a court might award, and a discussion of alternative actions that would minimize the government's infringement on property rights. Agencies do not publish those reports. In addition, the requirement that agencies prepare such analyses is not enforceable in the courts.

A number of the property rights proposals would modify the existing analysis requirement in different ways. Rather than applying the existing takings jurisprudence, some versions would require agencies to evaluate their proposed regulatory actions on the basis of broader eligibility criteria for compensation. Some of the bills would also make the agencies' written analyses available to the public and include them in records of rulemaking. A further change would be to make the agencies' compliance with the analysis requirement enforceable by the courts.

If those proposals were enacted, regulatory agencies would probably conduct more analyses, more thoroughly, than they do now. But unless the agencies could devote a much higher level of resources to the work, the conclusions of most analyses would probably remain qualitative. Except for the application of the most obvious restrictions to a particular property, it would be infeasible to prepare reliable, quantitative estimates because of the many uncertainties and lack of information.

Requiring agencies to publish their takings analyses might have countervailing effects. On the one hand, it would increase public awareness of the burdens that agencies impose on property owners. On the other, it might create an incentive for agencies to avoid reporting "bad news"—a finding that a proposed action would have a significant effect on property values. If agencies devoted considerable effort to avoiding possible criticism, the informational value of the analysis and reporting process could be compromised.

Using the courts to enforce a takings analysis requirement could have different effects depending on the scope of the courts' review. If the courts applied a low standard of review or did not assess the reasonableness of the analyses, the outcome might be one of

little or no effect. But if the courts evaluated the quality of the analyses according to a more stringent standard, regulatory agencies would have an increased incentive to prepare more thorough reports. A stringent standard of review might have an effect on property owners as well: it might encourage them to dispute the adequacy of the reports more frequently than they otherwise would in the hope of overturning or at least delaying an agency's decision. The source of that concern is the government's experience with a similar analysis requirement—the preparation of environmental impact statements as mandated by the National Environmental Policy Act of 1969.

Paying Compensation from Agency Budgets

In the present system for handling claims of regulatory takings, most compensation awards are typically paid from a special account called the Claims and Judgments Fund. No Congressional action is required to authorize payments from that account, nor do the payments affect the part of the budget that funds regulatory agencies. Critics of that approach to paying compensation argue that federal agencies should face a stronger financial deterrent to making decisions that are likely to result in compensation awards. One way to establish that kind of disincentive, they say, is to pay compensation directly from the appropriations of the agency whose action triggers the award.

Whether agencies could limit those activities that were most likely to lead to compensation would depend on their ability to anticipate such awards (and thus avoid the actions that were likely to trigger them). But even if agencies could always anticipate which of their actions would lead to compensation awards, they would also require adequate discretion to choose a different action that still satisfied their regulatory obligations under the law. The extent of their discretion varies with the language of the laws that they are entrusted with enforcing. It is also affected by the willingness of different interest groups to use the courts to force agencies to regulate in ways consistent with those groups' goals. For those reasons, it would be imprudent to assume that federal agencies were always

free to change their regulations and enforcement practices to avoid every action that might significantly reduce property values.

A requirement for paying regulatory compensation from an agency's budget could have several consequences. If an agency could not always predict the effects of the regulatory actions it proposed—or if it could not avoid certain actions—it might have to divert some portion of its appropriations to pay for the awards. Those payments in turn might reduce the resources available for meeting the agency's other statutory obligations. Unless the agency's appropriations were increased to offset the compensation payments it was expected to make, it might be forced to defer paying claims or to reduce its other activities.

Requiring agencies to pay compensation from their budgets would also affect the Congress. Under such an approach, the appropriations committees would ultimately be responsible for writing and approving the funding bills that allocated money to both ongoing activities and the payment of compensation. They would also have to respond to an agency's request for supplemental appropriations to pay unexpectedly large compensation awards. Those decisions would force the Congress to weigh the value of paying compensation awards against the value of spending for other programs.

In any year, the Congress could modify the proposed incentive system by changing the language of an agency's annual appropriations. For example, the Congress might choose to protect certain programs by earmarking their funds for specific uses that did not include the payment of regulatory compensation. Such changes would affect the agency's ability to pay outstanding claims and could dilute the incentives that proponents of property rights proposals hope to create. If paying compensation became a problem for an agency, the appropriations committees might also instruct it—again, through language in the appropriation—to change certain practices or policies in the hope of reducing future awards. Using the appropriation process in that way might in some instances produce less-than-optimal policymaking. In addition, such action creates procedural problems for the appropriations committees.

If agencies paid compensation from their appropriations, the Congress could exercise direct control over those payments through the annual appropriation process. That mechanism would allow it to limit the payments' effects on federal spending. But the Congress would not directly control the number of compensation awards. Rather, controlling factors would include the statutory eligibility criteria for compensation, the regulatory activities of federal agencies, and the willingness of property owners to sue for compensation. The Congress's inability to affect those factors directly might force it to decide between diverting scarce resources to pay outstanding compensation or deferring such payments until additional resources were available. During such deferrals, however, the awards would earn compound interest, which could become a sizable expense.

Estimating the Cost of Property Rights Proposals

What might happen to the number and size of compensation awards if the Congress enacted a law that was less restrictive than the constitutional takings jurisprudence in determining which property owners qualified for compensation for infringement of their property rights? That question reflects what is perhaps the most contentious issue in the debate over the various proposals considered by the Congress. Supporters of the proposals maintain that the number of individual compensation payments as well as the amount of the payments would be small (because agencies would avoid actions that might result in awards). They also argue that the Congress would retain control over the level of payments through the annual appropriation process. Critics counter that agencies would be unable to adjust their behavior sufficiently to offset a large increase in the number and size of awards. Furthermore, such critics argue, the relaxed eligibility criteria would lead to a deluge of spurious claims. The Congress might then face the unenviable task of choosing between diverting scarce funds to pay compensation or cutting back regulatory programs, particularly those that protect the environment.

The debate over takings legislation in the 104th Congress included a number of different estimates of the potential cost of compensating property owners. The Office of Management and Budget, for example, estimated that one of the proposals being debated would increase compensation awards by \$28 billion over seven years. However, it provided no supporting analysis for that conclusion, which makes the estimate difficult to evaluate. In its estimate of the budgetary effects of another proposal, CBO provided some indication of costs but was unable to produce any long-run figures for compensation payments because it could find no sound basis for making the calculation. The discussion below explains why such calculations are so difficult and why they generate such uncertain results. It also illustrates that uncertainty with several examples.

Difficulties in Estimating Changes in Compensation Costs

There are many barriers to a reasonably precise estimate of the change in compensation costs that statutory eligibility criteria could produce. First, to determine how many property owners would qualify for compensation under any set of eligibility criteria, one must have information on the distribution of regulatory effects—data regarding the average effect are not sufficient. For most federal regulatory programs, that information is unavailable.

Second, in cases in which the information is available, one must distinguish between those property owners who could qualify for compensation under the constitutional takings jurisprudence and those who would qualify under the proposed statutory eligibility criteria. That distinction is difficult to draw because the courts' jurisprudence is somewhat unclear and cannot be easily reduced to criteria that are comparable with the statutory criteria in proposals. (The statutory eligibility criteria are not totally without ambiguity either, in part because the effect of certain exceptions that they contain would have to be defined by the courts during litigation.)

Third, and perhaps most important, the proposed statutory compensation regime would involve a great

many actors who might respond in varying ways to the new incentives that the proposals are designed to create. Those actors include government regulators, property owners, the courts, and the Congress. Although reliably predicting the direction of certain responses is possible, predicting their magnitude is exceedingly difficult and may verge on the impossible. The potential increase in compensation awards is a function of all those actors' reactions, which makes it difficult to predict the size of any change.

The cost-estimating problems noted here are not unique to the issue of regulatory takings. Cost estimates are often made on the basis of less-than-ideal information, and simplifying assumptions are almost always required when predicting the effect of a new program before it is put into place. The difference is one of degree. Without knowing the distribution of regulatory effects, analysts find it exceedingly difficult to quantify the relationship between changes in eligibility criteria and the number of property owners who might qualify for compensation. That uncertainty dramatically increases the importance of the assumptions that the analysis uses. And in the context of property rights proposals, little agreement exists about what assumptions are reasonable.

Illustrative Estimates

CBO developed two illustrations of the estimating problem for the case of federal restrictions on the conversion of wetlands to other uses. Analysts made no attempt to capture all of the complexity described above. Instead, they attempted to use the available data on the rate of wetlands conversions and the economic activities that led to those conversions to impute plausible estimates of changes in property values that might be attributable to federal restrictions. Using two sources of data and assumptions about the effects of wetlands restrictions, CBO constructed a number of estimates. The variation among them was extreme—the largest estimate was over 300 times that of the smallest. No single point estimate is particularly informative. What is important is the vast range of the estimates and the tremendous uncertainty surrounding possible changes in property values attributable to federal regulation.

Introduction

The purpose of many federal regulatory actions is to protect or enhance the well-being of people and the environment. But regulations may also impose costs on the private sector by prohibiting certain activities and changing the way others are conducted. When the benefits and costs of a regulation are distributed unevenly, a basic question of fairness arises: When should a part of society bear the cost of a regulation whose benefits are enjoyed by society as a whole?

Federal regulatory programs that limit the use or development of privately owned land have provoked just such a question, and the debate has been a fierce one. Many of the programs arose out of the environmental concerns of the 1970s and subsequent legislation that focused on such public "goods" as preserving environmental amenities (such as wetlands) and the habitat of endangered species, and requiring the restoration of land that has been mined. But some property owners balk when they feel burdened by the costs of regulations that are not conspicuously related to public health and safety. Others question whether the government should be allowed to modify the bundle of rights associated with owning property and whether the government is acting fairly if it makes such changes but does not pay for them.

The debate about property rights is not limited to arguments about fairness. Some people contend that the government regulates inefficiently by imposing restrictions beyond the point at which the additional benefits of more regulation are at least as great as the additional costs. Those critics explain such behavior

in two ways. First, during decisionmaking, the government fails to adequately consider the costs that regulation imposes on the private sector because it does not bear those costs. Second, some federal agencies in their regulatory activities go beyond what the Congress intended when it created the programs.

Yet the government does not enjoy complete discretion in deciding how to distribute the costs of regulation. In the early part of this century, the Supreme Court ruled that if a government regulation goes "too far," it triggers the requirements of the Fifth Amendment to the Constitution.¹ When that happens, the government must compensate the owner for what is called a regulatory taking.

What Is a Regulatory Taking?

In defining regulatory takings, a convenient starting point is to examine a closely related issue: the federal government's right of eminent domain. The government may acquire private property for a public use without the individual property owner's consent—for example, to build or expand a road. But the Constitution requires that the government compensate the owner of the property. That requirement stems from the so-called takings clause of the Fifth Amendment, which states "nor shall private property be taken for public use, without just compensation." When the

1. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922).

government needs private property for a public use, it clearly declares its intent, condemns the specific property, and then pays the former owner "just compensation." Typically, the key issue in the government's use of its power of eminent domain is what constitutes just compensation—not whether payment is due.

Some of the government's actions do not formally condemn property through the use of eminent domain; but by severely restricting the property's use, they leave the owner in much the same position. In certain circumstances, the courts may declare such actions to be regulatory takings—because they have the same effect as eminent domain—and require the government to compensate the property owner. Thus, owners who believe that a government's action effectively "takes" their property can file suit against the United States for violating the Fifth Amendment and demand compensation. (That process is known as an inverse condemnation action.) In their suits, property owners must prove their assertion of a taking to the satisfaction of a court before they are eligible for compensation. In other words, the burden of proving that a regulatory taking has occurred falls on the property owner.

Some critics of federal regulatory programs maintain that whenever regulations impose heavy burdens on property owners, especially owners of land, the government in effect is taking private property in violation of the Fifth Amendment. In practice, however, the courts rarely go that far—for two reasons. First, the courts evaluate a property owner's taking claim according to a body of case law that is generally tolerant of actions by the government that serve legitimate public objectives. Second, procedural impediments and the cost of litigation make it difficult for property owners to get the courts to hear their suits and may deter some owners from even filing a taking claim. The discontent spawned by the current takings regime has prompted calls for easier access to compensation and deterrents to regulatory actions by government that infringe on property rights and values. Approaches for achieving those objectives are embodied in a number of legislative proposals that the Congress has considered over the past several years—and is likely to continue to debate in its upcoming sessions.

On many occasions, the Congressional Budget Office (CBO) has analyzed proposed legislation, fo-

cusing on how agencies would implement the bills and the potential consequences of their actions. This study differs from that model in that it deals to a great extent with legislative responses to matters of judicial interpretation. The issue of regulatory takings starts with the takings clause of the Constitution rather than laws written by the Congress. It is the courts, and especially the Supreme Court, that have interpreted that clause and set the criteria for what constitutes a regulatory taking. Some understanding of those criteria, the process of bringing claims, and the resulting decisions is necessary to evaluate legislative proposals for changing the current system. This study thus presents some of that necessary background. However, it is not a legal treatise on the takings clause of the U.S. Constitution.

Another factor in the somewhat different focus of this report is the prominent role that the courts would play relative to the legislative proposals for change. Some of the proposals, by establishing a statutory compensation program—that is, one enacted in law—would create a legislatively defined right to compensation in addition to the right set forth by the Fifth Amendment. Unlike many laws, which are carried out by executive branch agencies, the statutory approach would rely heavily on the federal courts for its interpretation and implementation.

This study evaluates the current system for handling claims alleging that a regulatory action by the government has taken private property. It discusses the major types of legislative proposals for changing that system and also explores the potential effects of the proposals on federal agencies and the federal budget. Included as well is a discussion of the frequency and outcome of takings claims against the government. To offer concrete examples, CBO considered takings that involve federal regulation of land use and in particular the regulation of wetlands.

Wetlands Regulation

A wide variety of federal activities affect real property and have triggered regulatory takings claims against the government. Those claims primarily involve a handful of regulatory programs that can limit the way

property owners use their land. The greater the burden that those limits impose on property owners, the more likely it is that owners will claim that such restrictions violate the takings clause of the Fifth Amendment. Moreover, that likelihood increases when new restrictions limit activities that were previously viewed as socially beneficial (for example, filling in swamps in order to use the land for some purpose such as agriculture) or an essential aspect of owning the property.

All of those issues are part of the context of the government's regulation of wetlands. As the name implies, wetlands are terrain that is covered by water or that has waterlogged soil for long periods of the growing season.² Some wetlands, such as swamps and marshes, are easy to identify; others are less obvious because they do not appear to be wet for much of the year. The difficulty in identifying wetlands is only one of several factors that make their regulation a lodestone for controversy.

Why Regulate Wetlands?

Only in the past several decades has the importance of wetlands become widely understood, and as a result, a variety of government programs that once encouraged their destruction have been modified or discontinued. Scientists have found that wetlands play an important role in maintaining the health of ecosystems. In the process, they also generate important economic benefits. By storing runoff from heavy rains, wetlands reduce flooding; along shorelines, they act as buffers to reduce erosion. By filtering and storing nutrients, sediment, and pollutants that rain washes from the land, wetlands protect water quality and reduce treatment costs as well as provide habitat for fish and wildlife. A third of the nation's threatened and endangered species rely on wetlands for their survival. Moreover, coastal wetlands act as spawning grounds and nurseries for most U.S. commercial fisheries. In addition,

wetlands provide open space, scenic views, and recreational opportunities.

Wetlands thus offer many benefits that can be classified as public goods—that is, goods accessible to all whose consumption by one person does not diminish the amount available to others. In most cases, however, property owners find it infeasible to capture and sell those benefits. Consequently, in making decisions about how to use their land, owners may disregard many of the economic benefits that stem from maintaining the land as wetlands and choose to convert it to other uses. In the process, they may reduce the overall economic benefits stemming from the use of the property. That type of situation is an example of what economists term a market failure, and some people offer it as a rationale for regulation in general and specifically as a justification for some government role in decisions about the use or alteration of wetlands.³

That justification is strengthened in the eyes of proponents of regulation by the destruction of wetlands that has accompanied the nation's growth. Since colonial times, the lower 48 states have lost more than half of their wetlands.⁴ Today, about 100 million acres of wetlands remain in those states, for a share of about 5 percent of their total surface area. The regulatory burden for the states is disproportionate because wetlands are not distributed uniformly. Just four states (Florida, Louisiana, Minnesota, and Texas) account for over a third of all such acreage. Almost three-quarters of the remaining wetlands are privately owned. That means that efforts by the government to stave off their destruction inevitably affect some private property owners.

2. For more detail, see National Research Council, *Wetlands Characteristics and Boundaries* (Washington, D.C.: National Academy Press, 1995), pp. 3-8; Army Corps of Engineers, *Army Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1 (Vicksburg, Miss.: Army Corps of Engineers, 1987); and T.E. Dahl, *Wetlands Losses in the United States, 1780's to 1980's* (Department of the Interior, Fish and Wildlife Service, 1990), p. 5.

3. Those decisions are complicated by a lack of information about the value of particular wetland properties. See Paul F. Scodari, *Wetlands Protection: The Role of Economics* (Washington, D.C.: Environmental Law Institute, 1990), pp. 17-18 and 45-46.

4. Data sources on wetlands losses are Department of the Interior, *The Impact of Federal Programs on Wetlands*, vol. 1, *A Report to Congress by the Secretary of the Interior* (October 1988), pp. 4-30 and 4-33; and Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-97*, Agricultural Handbook No. 712 (September 1997), p. 319.

The Army Corps of Engineers' Regulatory Program

The regulation of wetlands by the Army Corps of Engineers is a prime example of the kind of regulatory program that can lead property owners to pursue a taking claim. The basis for the Corps' regulatory actions is the Federal Water Pollution Control Act Amendments of 1972 (commonly known as the Clean Water Act), which authorize the federal government to regulate discharges of pollutants into the waters of the United States.⁵ In particular, section 404 of the Clean Water Act authorizes the Corps of Engineers to regulate "discharges" of dredge and fill material such as soil, which under the act are defined as pollutants.

The Corps' regulatory program has evolved over time through a series of administrative and judicial actions. For instance, although the act does not use the term "wetland," the courts have held that tidal and nontidal wetlands are part of "the waters of the United States."⁶ As a result, under the Section 404 program, the Corps regulates many activities that result in fill material being deposited on certain wetlands—for example, to prepare land for the construction of buildings.⁷

The Section 404 program makes the Army Corps of Engineers an integral part of the government's effort to preserve the nation's remaining wetlands. If a property owner wishes to fill a wetland in order to convert it to an alternative use—such as urban development—he or she in many instances will require a permit from the Corps. The Corps' general objectives in deciding whether to grant a permit are to avoid losses of wetlands where possible, minimize losses that cannot be avoided, and sometimes require property owners to

5. 33 U.S.C. 1344, 86 Stat. 884.

6. Those rulings came in *National Resources Defense Council v. Calaway*, 392 F. Supp. 685 (1975); and *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). See also C. Peter Goplerud, "Water Pollution Law: Milestones from the Past and Anticipation of the Future," *Natural Resources and the Environment*, vol. 10, no. 2 (Fall 1995).

7. The Clean Water Act exempts ongoing farming, forestry, and ranching activities, minor drainage and drain maintenance, and maintenance of preexisting structures from the Section 404 permitting requirement. If a wetland is to be dredged or filled to begin such practices, however, a permit is required.

"mitigate" those losses by creating new wetlands or by restoring the functions and values of wetlands that have been degraded.

The regulatory branch of the Corps of Engineers processes almost 65,000 Section 404 permit applications each year. It does that work with approximately 1,200 employees and a budget of just over \$100 million. Because its resources are limited, the Corps uses a system of "general" and "individual" permits to concentrate its resources on applications with the most significant potential effects on wetlands. The vast majority of permit applications—in 1996, 55,268 applications (or 86 percent of all applications)—are for general permits, which are usually evaluated within a few weeks.⁸ But when an applicant's proposal involves what could be a significant effect on wetlands and thus does not fall under one of the general permitting classifications, the property owner must apply for an individual permit. The Corps requires a great deal more information for such permits and reviews those applications much more closely. Consequently, individual permits are more difficult and more time-consuming to obtain than general permits. In granting an individual permit, the Corps may also require mitigation by the property's owner. The cost of mitigation can vary dramatically from one property to another.⁹

Other Programs and Policies Involving Wetlands

In addition to the Section 404 permitting program, a variety of other federal programs affect the use of wetlands. Those programs, which include the so-called Swampbuster provisions of the Food Security Act of 1985 and the Wetlands Reserve Program, provide incentives that are designed to encourage property owners to preserve or restore wetlands. In addition, some states have programs—in certain cases, stricter than the federal efforts—to discourage further wetlands conversions. Finally, the Tax Reform Act of

8. Statement of Michael L. Davis, Deputy Assistant Secretary of the Army for Civil Works, before the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure, April 29, 1997.

9. See Dennis King and Curtis Bohlen, "Estimating the Costs of Restoration," *National Wetlands Newsletter* (May/June 1994), pp. 3-5 and 8.

1986 eliminated a number of provisions in the tax code that indirectly subsidized the conversion of wetlands to agricultural uses.¹⁰

The Effects of the Wetlands Programs

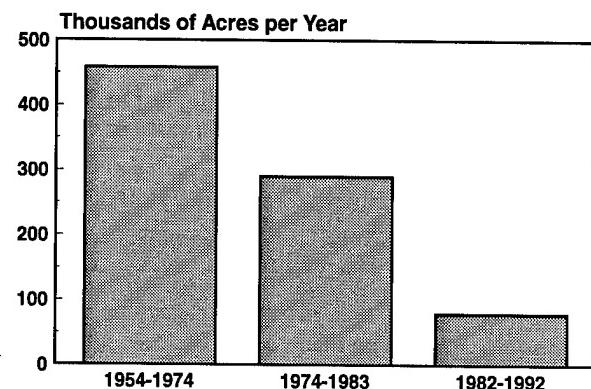
The continuing debate over the proper role of government and its regulatory functions has generated two important questions about the effects of the various wetlands-related programs. First, have the programs reduced the rate of wetlands losses over time? Second, do the programs impose substantial regulatory burdens on many property owners? Those questions are clearly tied together—if the number of profitable opportunities to convert wetlands declines, so should the rate of wetlands loss.

According to the Department of Agriculture, the net amount of wetlands conversion (that is, the number of acres of wetlands converted to other uses after taking into account wetlands that have been created or restored) has declined significantly over time (see Figure 1). In the past, flood control and drainage projects played a part in the conversion of many wetlands to agricultural uses in certain regions of the country. Also a factor were the income supports established by the federal government: by raising the profitability and reducing the risks of wetlands conversions, such subsidies hastened their destruction.¹¹ In recent years, wetlands conversions have dropped, in part because of changing economic conditions, declining agricultural subsidies, and fewer new flood control and drainage projects.¹²

The decline in the loss of wetlands over the past decades suggests fewer profitable opportunities to convert wetlands to other uses. How much of the de-

10. These programs are discussed in Ralph Heimlich and Linda Langner, *Swampbusting: Wetland Conversion and Farm Programs* (Department of Agriculture, Economic Research Service, August 1986), pp. 8-9; and Department of Agriculture, *Agricultural Resources and Environmental Indicators*, p. 319.
11. Department of the Interior, *The Impact of Federal Programs on Wetlands*, pp. 55-73.
12. Department of Agriculture, *Agricultural Resources and Environmental Indicators*, p. 316.

Figure 1.
**Average Annual Net Loss of Wetlands,
1954-1992**



SOURCE: Congressional Budget Office based on T.E. Dahl, R.D. Young, and M.C. Caldwell, *Status and Trends of Wetlands in the Coterminal United States: Projected Trends, 1985 to 1995, Draft Report* (Department of the Interior, Fish and Wildlife Service, 1997); and Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-97*, Agricultural Handbook No. 712 (September 1997).

NOTE: The estimates for 1954 to 1983 were taken from the Fish and Wildlife Service's *Status and Trends* report. The estimates for 1982 to 1992 were derived from the 1992 Natural Resources Inventory, a data set collected by the Natural Resources Conservation Service of the Department of Agriculture.

cline in those opportunities is attributable to federal regulations? In other words, how many property owners have been prevented from profitably converting their wetlands to other uses, and what is the extent of their losses? There are no easy answers to those questions.

One gauge of the regulatory burden that restrictive federal regulations place on property owners may come from examining the permit application decisions of the Army Corps of Engineers. As noted earlier, the vast majority of applications to dredge and fill wetlands involve general permits, and the Corps accepts over 90 percent of them.¹³ But applications for projects that require an individual permit are typically not as successful. A review of a sample of individual permit applications for fiscal years 1988 to 1993

13. Army Corps of Engineers, Regulatory Branch, *Section 404 of the Clean Water Act and Wetlands: Special Statistical Report* (July 1995). More recent data are provided in the statement of Michael L. Davis, April 29, 1997.

found that a majority of them were withdrawn before the Corps made a decision on them.¹⁴ Because an application is withdrawn does not necessarily mean that a project does not go forward. However, the large number of withdrawals suggests that property owners consider it quite difficult to obtain an individual permit.¹⁵

Yet the outcome of permit applications tells only part of the story of how federal regulations restrict the use of wetlands. Also a factor are projects that property owners would undertake but for the knowledge that their chances of obtaining a Section 404 permit are small. If the Corps' regulatory program is responsible for a significant drop in the rate of development of wetlands, it may be because a large number of property owners have entirely abandoned their conversion efforts. The number of those forgone projects is unknown. A great deal of uncertainty thus exists about how the Corps' regulatory program actually affects the loss of wetlands and the investment opportunities of property owners.¹⁶

Takings Claims Against the Federal Government

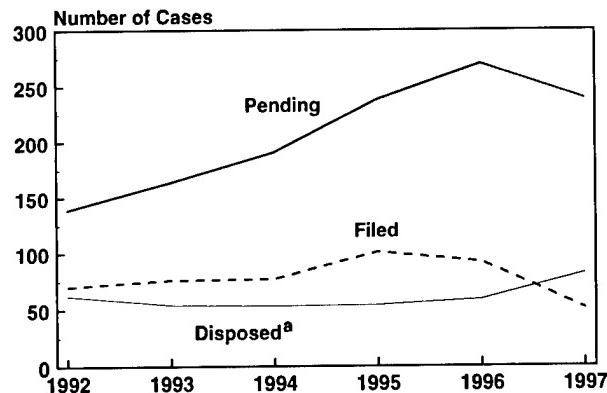
The body of law that the courts apply in judging a taking claim allows the government considerable latitude to regulate without causing a taking. Thus, the courts find that most federal restrictions do not constitute a taking unless they entirely eliminate the value of the

14. Based on Army Corps of Engineers data and data reported in Virginia S. Albrecht and Bernard N. Goode, *Wetland Regulation in the Real World* (Washington, D.C.: Beveridge and Diamond, February 1994), p. 23.

15. A recent estimate of the average evaluation time for individual permits by the Corps is 104 days (see the statement of Michael L. Davis, April 29, 1997). Albrecht and Goode used a different method and found that the average time between the application and decision dates for a sample of individual permit applications processed in fiscal year 1992 was 373 days (see *Wetland Regulation in the Real World*, p. 16).

16. Two separate evaluations of the regulatory program reached similar conclusions: Office of Technology Assessment, *Wetlands: Their Use and Regulation*, OTA-O-206 (March 1984), pp. 142-144 and 152; and General Accounting Office, *Wetlands: The Corps of Engineers' Administration of the Section 404 Program*, GAO/RCED-88-110 (July 1988), pp. 20-22 and 33-34.

Figure 2.
Takings Cases in the U.S. Court of Federal Claims at the End of the Fiscal Year, 1992-1997



SOURCE: Congressional Budget Office based on data from the Clerk of the U.S. Court of Federal Claims.

NOTE: In some years, the number of cases pending does not add up to the number of cases filed and disposed because some cases involve multiple claims or claimants and may result in multiple judgments.

a. "Disposed" cases are cases that are removed from the docket because they are dismissed by the court, withdrawn by the claimant, settled out of court, adjudicated, or transferred to another court.

regulated property or some fundamental right of ownership. Still, that conclusion is a qualified one. Over the past five years, the courts have awarded property owners several hundred million dollars in compensation, notwithstanding the fact that successful regulatory takings claims are the exception rather than the rule.

The exact number of regulatory takings claims now pending against the federal government is difficult to determine because of the way data on cases are collected. At the end of fiscal year 1997, the Justice Department's Environment and Natural Resources Division reported that it was defending the United States in 178 takings cases involving real property, which should account for most of the claims stemming from federal environmental and land-use regulations.¹⁷ Most takings cases require more than a year to litigate.

17. Department of Justice, Environment and Natural Resources Division, Policy Legislation and Special Litigation Section, "The Regulatory Takings Docket of the Justice Department's Environment and Natural Resources Division, End of Fiscal Year 1997" (mimeo, October 1997).

Consequently, the 178 cases should reflect claims from several years of regulatory action.

A second source of data on the volume of regulatory takings claims is the U.S. Court of Federal Claims, which hears most of the cases in which a property owner is seeking monetary compensation from the federal government. The number of claims pending in the Federal Claims Court rose throughout most of the 1990s; however, there were never more than 300 cases open at the end of the fiscal year during the 1992-1997 period (see Figure 2). The largest number of new takings claims filed in any year in that period was 101, in 1995.

Grouping the takings cases on the Justice Department's docket by the regulatory activity that generated the claims shows that fully a quarter of the pending cases at the end of 1997 stemmed from the Army Corps of Engineers' Section 404 wetlands permitting program (see Table 1).¹⁸ Only two cases on the docket concerned restrictions imposed under the Endangered Species Act. That small number of claims might suggest that the law does not greatly affect the use of private land. Alternatively, it might reflect the degree of difficulty involved in filing a taking claim related to that act.¹⁹

The relative scarcity of takings claims overall may hinge in part on what property owners see as their prospects for winning their suit. Takings claims against the federal government rarely succeed. Data collected on the total caseload of the U.S. Court of Federal Claims during the 1992-1997 period reveal that the court dismissed more than 60 percent of such claims, or 224 cases (see Table 2). Another 21 percent (76 claims) were withdrawn by the property owner. The outcome of less than 8 percent of claims (28 cases) was a judgment against the United States. About 9 percent (33 cases) were settled; most of those claims involved a payment by the government.

18. Regulations regarding wetlands are the most significant cause of takings claims. Nevertheless, the number of such claims is minuscule when compared with the volume of permit applications that have been approved in recent years. See the statement of Michael L. Davis, April 29, 1997.

19. Barton H. Thompson Jr., "The Endangered Species Act: A Case Study in Takings and Incentives," *Stanford Law Review*, vol. 49, no. 2 (January 1997), pp. 305-380.

Despite the small number of successful takings claims, the Court of Federal Claims has awarded a substantial amount of compensation (see Table 3). From 1992 to 1997, 364 cases were either disposed of by the court or withdrawn by the property owner. Only about 15 percent of the cases handled by the court resulted in an award or settlement, but the total amount of compensation involved was almost \$350 million. Ten decisions accounted for three-quarters of that amount. The single largest, for \$200 million, was a settlement related to mining restrictions imposed un-

Table 1.
Selected Takings Claims Pending Against the United States, by Regulatory Program or Type of Regulation, 1997

Regulatory Program/ Type of Regulation	Number of Cases
Section 404 Wetlands Permitting Program	46
Cases Involving Denial of Access to Land ^a	34
Superfund ^b	22
Oil, Gas, and Mineral Interests ^c	15
Breach of Contract Involving Real Property	12
Surface Mining Regulations	5
Taking of Reversionary Interests in Rights-of-Way Under the Rails-to-Trails Act	4
Endangered Species Act	2
Land-Use Restrictions Imposed Near Military Air Bases	2
Other ^d	<u>36</u>
Total	178

SOURCE: Congressional Budget Office based on the regulatory takings docket of the Justice Department's Policy Legislation and Special Litigation Section of the Environment and Natural Resources Division for October 1997.

NOTE: The table includes only cases handled by the Environment and Natural Resources Division. Other divisions of the Justice Department also deal with takings claims.

- a. An example of such a case would be a situation in which the government disputed the validity of a property owner's mineral interest on federal land.
- b. The placement of monitoring wells on private property is an example of a taking case under Superfund.
- c. Includes claims arising from the Outer Continental Shelf Lands Act.
- d. For example, protections for wild horses and wildlife, land-use restrictions imposed near military installations (other than air bases), and actions related to the gorge of the Columbia River basin.

der the Surface Mining Reclamation Control Act of 1977 (see Box 1).

An award of compensation does not necessarily mean that the federal government has actually paid money to the property owner. The government appeals some of the judgments against it, and those appeals sometimes lead to a reversal of the decision by a higher court. In instances in which the government

Table 2.
Outcome of Takings Claims in the U.S. Court of Federal Claims, Fiscal Years 1992-1997

Outcome	Number of Claims	Percentage of All Claims
Dismissed	224	61.5
Withdrawn by the Claimant	76	20.9
Settled ^a	33	9.1
Ruled to Be a Taking	28	7.7
Transferred to Another Court ^b	3	0.8
Total	364	100.0

SOURCE: Congressional Budget Office based on data from the Clerk of the U.S. Court of Federal Claims.

a. A stipulated settlement between the claimant and the government.

b. For example, the Court of International Trade or a U.S. district court.

does pay the award, a substantial amount of time may elapse between the award date and the payment date because of appeals. That delay can mean sizable interest payments to successful claimants.

A diverse set of agencies account for the regulatory actions that prompt takings claims. Many of the claims that the Court of Federal Claims handled between 1992 and 1997 involved the Army Corps of Engineers, the Department of the Interior, or the Environmental Protection Agency (see Table 3); the most likely triggering circumstances for those cases were, respectively, section 404 of the Clean Water Act (the wetlands permitting program); restrictions on the development of oil, gas, and mineral interests on federal lands; and activities related to Superfund. Those cases also represent a majority of the judgments against the federal government. But other government agencies as well, including the armed forces, the Treasury Department, and the Justice Department, have been the object of a surprising number of claims. (Box 2 provides examples of the diversity of takings claims.)

To a large extent, the distribution of recent regulatory takings claims against specific government agencies results from the expectations that property owners have of prevailing in claims against them. Those expectations in turn arise from the courts' interpretation of the takings clause of the Fifth Amendment and the previous success of claimants for compensation.

Table 3.
**Takings Claims Handled by the U.S. Court of Federal Claims, by Department or Agency,
Fiscal Years 1992-1997**

Department/Agency	Total Claims Disposed ^a	Judgments ^b		
		Number ^c	Percentage of All Claims	Total Amount Awarded ^d (Thousands of dollars)
Agriculture	25	4	16	203
Air Force	8	1	13	425
Army	72	16	22	12,984
Energy	6	1	17	187
Environmental Protection Agency	21	5	24	9,630
Interior	51	12	24	322,678
Justice	33	1	3	6
Navy	14	5	36	512
Treasury	25	2	8	340
Other Departments and Agencies ^e	42	4	10	1,176
Other ^f	<u>67</u>	<u>2</u>	3	<u>850</u>
Total	364	53	15	348,989

SOURCE: Congressional Budget Office based on data from the Clerk of the U.S. Court of Federal Claims.

- a. In addition to claims that resulted in a compensation award by the court, this category includes claims that were withdrawn by the claimant, dismissed by the court, or settled.
- b. Includes settlements by the parties.
- c. Does not include 15 awards of expenses totaling \$1.2 million.
- d. An award of compensation does not necessarily mean that compensation was paid. Some cases may be pending on appeal; others may have been overturned on appeal.
- e. This category comprises the Departments of Commerce, Defense, Health and Human Services, Housing and Urban Development, Labor, State, Transportation, and Veterans Affairs, as well as the National Aeronautics and Space Administration, Drug Enforcement Administration, Federal Communications Commission, General Services Administration, Interstate Commerce Commission, Marine Corps, Small Business Administration, and Postal Service.
- f. Government units that are not included in other categories. This group may cover specific divisions of agencies listed elsewhere; some examples are the Fish and Wildlife Service, Animal and Plant Health Inspection Service, and Coast Guard.

Box 1.
A \$200 Million Taking—The Claim of Whitney Benefits, Inc.

At \$200 million, the settlement in the Whitney Benefits case is the most expensive takings payment that the government has made to date.¹ The claim involved the application of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) to a coal lease owned by Whitney Benefits, Inc. The coal was located beneath an alluvial valley floor in the Powder River basin of Wyoming; SMCRA prohibits surface mining in such areas to protect agricultural resources. After unsuccessfully attempting to exchange the lease for certain federally owned resources, the lease's owner filed a taking claim in the U.S. Court of Federal Claims.

A series of trials and appeals led to a settlement that awarded the coal leaseholder \$60 million plus interest from the date of the taking (1977—the date of passage of SMCRA). The court held that SMCRA eliminated the value of the lease, upsetting the owner's reasonable, investment-backed expectations about the property, and that the substantial public interest at stake did not outweigh the interest of the private owner. In addition, the court found that the taking occurred with the enactment of SMCRA rather

than with its enforcement. The basis of that finding was a grandfather clause that was omitted from the final law but that appeared in an earlier version of the legislation. The clause excluded several properties, including the Whitney tract, from regulation and, according to the court, demonstrated that the Congress knew that SMCRA would adversely affect the mining rights associated with the Whitney Benefits property. Because the Congress willingly chose to let that happen, the court deemed the Whitney Benefits claim to be a taking and awarded compensation as of the date of SMCRA's enactment.

Most of the payment in the Whitney Benefits settlement—\$140 million of the \$200 million awarded—is interest because of the substantial delay between the date of the actual taking (1977) and the settlement date (1995). One reason for the delay was the difficulty of determining the value of the taken property. Valuing the lease required considering such issues as future coal prices, extraction costs, labor costs, demand for various grades of coal, transportation costs, capital costs, the amount of extractable coal, environmental cleanup costs, and the appropriate discount rate, to name only a few. Experts retained by each side in the dispute contested the values arrived at for those factors, which extended the litigation of the claim and delayed the award.

1. *Whitney Benefits, Inc. v. United States*, 926 F.2d 1169 (Fed. Cir., 1991), cert. denied, 502 U.S. 952 (1991).

Box 2.**The Diversity of Government Actions That Have Led to Successful Takings Claims**

The following are examples of successful takings cases decided against the federal government:

Noise from Military Aircraft—*Branning v. United States*, 654 F.2d 88 (Ct. Cl., 1981). The court held that noise from low-flying Marine Corps aircraft caused a taking, despite the fact that the aircraft were above the 500-foot aerial easement typically granted to landowners.

Forfeiture of a House to the United States—*Shelden v. United States*, 7 F.3d 1022 (Fed. Cir., 1993). The owner of a second mortgage on property forfeited to the United States (because of the borrower's criminal conviction on racketeering charges) prevailed in a taking claim against the federal government for "destruction" of its mortgage.

Installation of Groundwater Monitoring Wells—*Handler v. United States*, 952 F.2d 1364 (Fed. Cir., 1991); 36 Fed. Cl. 574 (1996). The circuit court found that the installation of wells by the Environmental Protection Agency to monitor a plume of contaminated groundwater was a taking by physical occupation. On remand, the U.S. Court of Federal Claims awarded no compensation, holding that the benefits of the wells to the landowner outweighed any damages from the occupation.

Denial of an Oil and Gas Drilling Permit—*Bass Enterprises Production Co. v. United States, Rev'd.*, 133 F.3d 893 (Fed. Cir., 1988). The owner of a federal lease was denied a permit to drill for oil and gas by the Bureau of Land Management pending a determination by the Environmental Protection Agency of whether drilling would be consistent with the Waste Isolation Pilot Plant Land Withdrawal Act of 1992. The U.S. Court of Federal Claims held that the denial was a permanent taking. The Court of Appeals reviewed the case and remanded it for trial on the issue of temporary taking.

Statutory Cancellation of Coal Exploration Permits—*NRG Co. v. United States*, 24 Cl. Ct. 51 (1991). In accordance with the Act of October 9,

1980 (the Cancellation Act), the Bureau of Indian Affairs canceled permits authorizing mineral prospectors to explore for coal on Indian lands. The court held that the cancellation was a taking.

A Poultry Quarantine—*Yancey v. United States*, 915 F.2d 1534 (Fed. Cir., 1990). A quarantine that the U.S. Department of Agriculture imposed on uninfected turkeys to control the spread of avian influenza was held to be a taking.

A Statute Limiting the Division of Indian Land—*Babbitt v. Youpee*, 519 U.S. 234 (1997). The Supreme Court, affirming the decision of the lower court, found the federal statute that treated the division of Indian land ownership to be a taking. The statute, section 207 of the Indian Land Consolidation Act, attempted to prevent the fractionalization of Indian land. Under the law, the owner of an allotment was precluded from bequeathing his or her property to multiple heirs if the resulting parcels did not meet certain acreage and income standards.

Use of a Patented Mining Process—*Dow Chemical Co. v. United States*, 32 Fed. Cl. 11 (1994). The court held that the use of a patented process for injecting slurry into mine voids without securing a license from the patent holder constituted a taking of the license.

Making a Company Responsible for an Under-funded Health Plan—*Eastern Enterprises v. Apfel*, 118 S. Ct. 2131 (1998). Claimants challenged reach-back provisions in the Coal Industry Retiree Health Benefit Act of 1992 that made them responsible for underfunded miner retiree health plans and sought injunctive and declaratory relief. The District Court granted a summary judgment for the government, ruling against the claimant, and the First Circuit Court affirmed the decision. The Supreme Court reversed the decision, sending the case back to the lower court to be decided consistent with the finding that the act constituted a taking. Enforcement of the act was suspended as applied to Eastern Enterprises.

Regulatory Takings: The Status Quo

At present, many property owners see regulatory takings claims as an unattractive mechanism for obtaining relief from government regulations. As noted earlier, most takings claims fail unless the effect of a regulation is to eliminate all or nearly all of the value of the regulated property or unless the claim triggers one of the courts' several specific criteria for a taking. As a result, successful takings claims against the federal government are infrequent, especially given the considerable number of federal regulatory actions each year. In addition to the small probability of winning compensation, the process of filing claims and getting them heard by the courts may deter some property owners because it is often complicated, expensive, and time-consuming. Those drawbacks may explain why relatively few takings claims are filed each year. They are also part of the rationale for the various property rights proposals introduced in recent sessions of Congress.

How the Courts Evaluate Regulatory Takings Claims

When the courts evaluate regulatory takings claims under the Fifth Amendment, they apply the legal reasoning, or jurisprudence, developed by the Supreme Court in previous decisions and interpretations of the Constitution.¹ The first decision by the Supreme

Court that a land-use regulation violated the Fifth Amendment's takings clause occurred in 1922.² In that decision, *Pennsylvania Coal Co. v. Mahon*, the Supreme Court held that a Pennsylvania state law forbidding mining that might cause subsidence was a regulatory taking.³ (In subsidence caused by mining operations, the ground sinks, damaging structures on the surface.) Writing for the Court in the case, Justice Oliver Wendell Holmes captured an essential aspect of the controversy over regulatory takings. On the one hand, as he wrote, "[t]he general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far, it will be recognized as a taking." On the other hand, "[g]overnment could hardly go on if to some extent values incident to property could not be diminished without paying for every such

(1995), pp. 349-414; Daniel Mandelker, *Land Use Law*, 3rd ed. (Charlottesville, Va.: The Michie Company, 1993); Robert Meltz, *When the United States Takes Property: Legal Principles*, CRS Report for Congress LTR 91-339A (Congressional Research Service, March 22, 1991); Andrea L. Peterson, "The Takings Clause: In Search of Underlying Principles," *California Law Review*, vol. 77 (December 1989), pp. 1301-1363; and Richard J. Roddewig and Christopher J. Duerkson, *Responding to the Takings Challenge: A Guide for Officials and Planners*, Planning Advisory Service Report No. 416 (Chicago: American Planning Association, 1989).

2. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922). The issues in this case are complex because of the nature of property rights in the state of Pennsylvania. For a more detailed account of the facts underlying the case, see William A. Fischel, *Regulatory Takings: Law, Economics, and Politics* (Cambridge, Mass.: Harvard University Press, 1995), pp. 13-47.
3. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922). Underlying the decision was the fact that people with surface rights who were affected by the law had bought their property with the express knowledge that coal companies (which owned the subsurface rights) were not liable for damage resulting from subsidence.

1. This section is based on a reading of cases and on the following sources: Richard C. Ausness, "Regulatory Takings and Wetland Protection in the Post-Lucas Era," *Land and Water Review*, vol. 30, no. 2

change in the general law.⁴ Since that decision, most of the debate over regulatory takings has focused on what constitutes going "too far."

Decisions by the Supreme Court provide guidelines for how courts today should determine whether government actions constitute takings of private property. According to that body of law, some government actions are clearly takings and others are clearly not. But some actions fall between those two extremes, occupying a murky middle ground that exists, to some extent, because the Supreme Court has never developed a specific test or formula for what constitutes a taking. As the Court noted in the *Pennsylvania Coal Company* decision, "this Court, quite simply, has been unable to develop any 'set formula' for determining when 'justice and fairness' require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons." The Court went on to observe that "whether a particular restriction will be rendered invalid by the government's failure to pay for any losses proximately caused by it depends largely 'upon the particular circumstances [in that] case.'⁵

If it is unclear whether a government's action is a regulatory taking, the courts usually weigh a variety of factors, balancing them on a case-by-case basis.⁶ Those factors include:

- o The character of the government's action;
- o The extent to which the action interferes with reasonable, investment-backed expectations; and

4. Ibid., p. 413.

5. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 123 (1978), citations omitted. The Court is quoting from its decisions in *Armstrong v. United States*, 364 U.S. 40, 49 (1960), and *United States v. Central Eureka Mining Co.*, 357 U.S. 155, 168 (1952).

6. The factors are developed in cases such as *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978); *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); *Agins v. City of Tiburon*, 447 U.S. 255 (1980); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982); *Hodel v. Irving*, 481 U.S. 704 (1987); *Keystone Bituminous Coal Ass'n. v. De Benedictis*, 480 U.S. 470 (1987); *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987); *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992); *Dolan v. City of Tigard*, 512 U.S. 374 (1994); and *Babbitt v. Youpee*, 117 S. Ct. 727 (1997).

- o The action's economic impact.

The Character of the Government's Regulatory Action

In considering this factor, the courts weigh the nature and extent of the impact of the regulatory action. If the government has interfered with certain fundamental property rights, a court may find that action to be a regulatory taking. Among those rights is the owner's right to exclude other people from the property. Hence, the courts almost always find that a permanent physical occupation is a taking of private property. (A few examples are the installation of groundwater monitoring wells, a requirement to wire apartment buildings for cable television, and river management that leads to regular flooding of private property.)⁷

Another fundamental property right whose restriction may trigger the finding of a taking is the right to pass property to one's heirs. In 1987, in *Hodel v. Irving*, the Supreme Court held that a federal statute requiring certain small interests in Indian land to revert to the tribe rather than to heirs violated the takings clause because it interfered with that fundamental property right.⁸

When a court investigates the character of a regulatory action, it also explores the action's purpose and rationale. If an action does not "substantially advance legitimate state [that is, government] interests," the court is more likely to find a taking.⁹ The court is far less likely to do so if the purpose of the action is to protect public health and safety or to prevent the creation of a nuisance or the "noxious" use of a piece of property.¹⁰ Of course, courts differ on the activities

7. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982); *United States v. Cress*, 243 U.S. 316 (1917); *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); and *Hendler v. United States*, 19 Cl. Ct. 27 (1989).

8. 481 U.S. 704 (1987).

9. *Agins v. City of Tiburon*, 447 U.S. 255, 260 (1980).

10. *Keystone Bituminous Coal Ass'n. v. De Benedictis*, 480 U.S. 470 (1987). An example of a nuisance would be the industrial use of a piece of property in a way that would have a detrimental effect on the well-being of the surrounding community. The legal doctrine of nuisance in the context of takings is discussed in Chapter 3.

that they consider to be advancing legitimate public purposes.

Courts also examine the connection between the regulatory action that a property owner is challenging and the rationale for the regulatory authority. If the action is not closely related to the harm that the government is allegedly trying to control, the courts may find the action to be a taking. For instance, if the government simply demands an easement across private property in order to allow access to a public beach, that action is probably a taking. But if the government tells a property owner that he or she must grant an easement across the property as a condition for a building permit that the owner has applied for, the government's easement demand is probably not a taking. However, the easement in that instance must be furthering the governmental interests that would otherwise justify the denial of the permit.

The situation would be different if the easement demanded by the government as a condition for issuing the building permit did not substantially advance the public purpose underlying the permitting program, which gives the government the authority to deny building permits. In those circumstances, the demand might constitute a taking—just as it would have if the government had simply demanded the easement.¹¹ (This example gives some indication of the complex issues that the courts must deal with in judging the merits of claims of regulatory takings.)

The law applying to regulatory takings is implicitly concerned with balancing potentially disproportionate harms and benefits. However, one area of the law in which that concern is explicit is the use of so-called exactions and dedications by state and local governments. Under those mechanisms, governments demand certain preconditions, payments, and land set-asides before they will allow particular uses of property. In that area of property law, the Supreme Court has held that if the severity of the conditions that must be met to secure a permit is disproportionate to the harm being prevented, the conditions may constitute a taking.¹² For example, it may be reasonable for a lo-

cal government to refuse to issue a permit to build a store unless the owner provides enough parking spaces for prospective customers, so that overall public parking near the store remains adequate. But it might be unreasonable—and thus a taking—to make the permit conditional on the owner's providing a large, multi-story parking garage whose capacity would vastly exceed the possible parking needs of the customers of the store.

Interference of the Action with Reasonable, Investment-Backed Expectations

In considering this factor, the courts determine whether and to what extent a government's regulatory action may conflict with property owners' reasonable expectations about what they can do with their property—as reflected in part by the investment they have made in it.¹³ The more evidence there is that the property owner should have or could have reasonably expected the government's action, the greater the likelihood that the courts will not consider the regulation to be a taking. The latter is especially true if the owner's investment in the property indicated such an expectation.¹⁴

Consider, for example, a person who bought property composed of wetlands in the mid-1960s and one who bought such property in 1998. In the mid-1960s, there were few or no restrictions on filling wetlands, and the buyer would have paid a price that reflected the property's relatively unrestricted development opportunities. In contrast, the person who bought wetlands in 1998 would have paid a price reflecting the likelihood that federal regulation might thwart (or at least limit) development. In terms of a taking claim, the courts would probably find that the mid-1960s buyer had a reasonable, investment-backed expectation of being able to develop the property and that government regulations preventing that development could well be considered a taking. The 1998

11. See *Nollan v. California Coastal Commission*, 483 U.S. 825, 836 (1987).

12. *Dolan v. City of Tigard*, 512 U.S. 374 (1994).

13. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978).

14. See Lynda J. Oswald, "Cornering the Quark: Investment-Backed Expectations and Economically Viable Uses in Takings Analysis," *Washington Law Review*, vol. 70, no. 91 (1995).

buyer, however, would probably lack a reasonable, investment-backed expectation; in that instance, the court might well decide that regulations precluding development were not a taking.

The Economic Impact of the Government's Action

To assess economic impact, the courts ask what proportion of the total value of the property was eliminated by the government's regulatory action. Extreme reductions in value may—or may not—倾斜 a court to judge the action to be a taking.¹⁵ No court has ever articulated a specific reduction-in-value threshold—except for an action that almost totally eliminates the property's value, which is likely to be a taking barring certain exceptions. Even in cases that involve apparently severe reductions in value, sometimes exceeding 80 percent, the courts have not always found that a taking occurred, typically because they weigh other factors more heavily.¹⁶

Measuring a reduction in value requires a decision about what property to include in the calculation. Should it be the entire property and all the rights associated with it? Or should the analysis be limited to that part of the property or to particular property rights that the regulation directly affects? The Supreme Court has stated that the calculation should be made on the basis of the "parcel as a whole" and not on the basis of the affected portion.¹⁷ In practice, what constitutes the property "as a whole" is not always obvious (see Chapter 3). In most situations, reduction-in-value calculations based on the entire property will be proportionately smaller than calculations based only on the affected portion.

At times, the courts evaluate the economic impact of a regulatory restriction by examining the re-

maining permissible uses of the property. If a government's regulatory action leaves a property with no "economically viable use," a court is likely to consider that action a taking, subject to certain exceptions such as the protection of health and human safety or the prevention of a nuisance.¹⁸ For example, in *Lucas v. South Carolina Coastal Council*, the Supreme Court found that a building setback requirement that largely prohibited the development of a property was a taking because it left the owner with no economically viable use for the land. However, since few regulatory actions eliminate all economic uses of a property, takings cases are rarely decided solely on the issue of a reduction in the property's value.

How a court will decide a particular taking claim is often difficult to predict. At different times, in different settings, and on the basis of the unique set of facts in a specific case, the courts have described, considered, and weighted the factors that make up the takings jurisprudence in varying ways. And lower courts, such as the federal district courts and the U.S. Court of Federal Claims, sometimes confront unique situations in which the Supreme Court's precedents provide little guidance.

Jurisdiction: Where and When Are Takings Claims Filed?

Before a court actually hears and judges the merits of a taking claim based on a government's regulatory action, certain timing and jurisdictional issues may arise. The property owner must decide on the appropriate court in which to file his or her suit. Another consideration is when to bring the claim. The legal doctrines of ripeness, abstention, and exhaustion of remedies apply to all lawsuits filed in a court, but their role in the area of regulatory takings is especially prominent. In the eyes of property owners, those doctrines establish an onerous barrier to their ability to get a court to decide the merits of their claim.

15. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922).

16. See William S. Walter, "Appraisal Methods and Regulatory Takings: New Directions for Appraisers, Judges, and Economists," *Appraisal Journal* (July 1995), Figure 2, p. 338, for a summary of diminutions in values for regulatory takings cases for the 1915-1994 period.

17. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 132 (1978).

18. *Agins v. City of Tiburon*, 447 U.S. 255 (1980); and *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992).

The Ripeness Doctrine

No matter which court is involved, a claim must meet the standards established for "ripeness." Ripeness is a generally applicable legal doctrine that ensures that a court will hear no case "before its time." In other words, a case will be heard only when the court has before it the details of a concrete, factual situation that will permit it to engage in an intelligent, reasoned balancing of the rights of an individual and the interests of the government.

In the context of a regulatory taking claim, the Supreme Court has held that a claim is not "ripe" for adjudication "until the government entity charged with implementing the regulations has reached a final decision regarding the application of the regulations to the property at issue."¹⁹ Thus, the ripeness requirement means that courts typically will not consider a regulatory taking claim until an agency has made a *final* decision on a specific piece of property and the owner has felt the concrete effects of that decision. Courts can then determine the exact nature of the restrictions being imposed and their specific effects on the property in question. In the words of the Supreme Court in 1986, "it follows from the nature of a regulatory taking claim that an essential prerequisite to its assertion is a final and authoritative determination of the type and intensity of development legally permitted on the subject property. A court cannot determine whether a regulation has gone 'too far' unless it knows how far the regulation goes."²⁰

In rare instances, a court may agree to hear a taking claim (that is, it may find the claim ripe for adjudication) before a law or regulation has been applied to any specific piece of property. In such cases, property owners assert that the very language of the law or regulation is a taking and its application to a particular property is irrelevant. Those cases are sometimes called "facial challenges," because they challenge a law on its face. Facial challenges meet the ripeness standard because the language of the statute alone makes them ripe in the eyes of the court. Such claims

are very hard to win, however, because of the great difficulty of convincing a court that a law or regulation is so inflexible and its effects always so severe that the particular circumstances of the property owner are irrelevant to the court's conclusions.

Ripeness, Exhaustion of Remedies, and Abstention for Claims Involving State or Local Governments

Nearly all state constitutions contain provisions similar to the takings clause of the Fifth Amendment. For that reason, property owners who allege that an action by a state or local government has taken their property can file a taking claim either in a state court, based on the state constitution, or in a federal court, based on the U.S. Constitution. The relations between federal and state courts are governed in part by self-imposed guidelines that the courts have established to minimize conflict and to ensure that claims are not brought to federal courts if they can be resolved at the state level. Thus, federal courts may require property owners who are making claims as a result of state or local government regulations to exhaust all existing judicial and administrative approaches for obtaining compensation at the state level before they consider such claims ripe for a hearing in federal court.

Under the abstention doctrine, the federal courts may abstain from exercising jurisdiction over a taking claim. Abstention typically occurs if the interpretation of an issue of state law relevant to the claim is unclear and that interpretation, once made, might eliminate the need to decide the federal constitutional issue. Federal courts do not invoke abstention to avoid considering a claim in instances in which the state law is "settled" (that is, the interpretation is clear) or in cases in which the state's action is unconstitutional regardless of how the state court interprets the law. Abstention postpones federal jurisdiction; it does not preclude it indefinitely.

Jurisdiction of the Federal Courts

The Tucker Act of 1887 lays out the jurisdictions of the various federal courts that affect claims related to

19. *Williamson County Regional Planning Commission v. Hamilton Bank*, 473 U.S. 172 (1985).

20. *MacDonald, Sommer & Frates v. Yolo County*, 477 U.S. 340 (1986).

takings.²¹ The act gives the U.S. Court of Federal Claims jurisdiction over most large money claims against the United States. Thus, a property owner who wishes to obtain just compensation of more than \$10,000 from the federal government for a regulatory taking must file the lawsuit in the U.S. Court of Federal Claims. Claims involving less than \$10,000 may be filed either in the Court of Federal Claims or in federal district courts.

Whether the U.S. Court of Federal Claims will consider the merits of a taking claim may hinge on whether the property owner is challenging the validity of the federal action in the district court. In the district court, the claimant may try to overturn the agency's action, arguing that the action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."²² But pursuing that claim in the district court is likely to postpone and may in the end preclude the Court of Federal Claims' consideration of a taking claim seeking compensation—because the court will not award compensation for a permanent taking on the basis of an unlawful federal action.²³

Typically, state courts hear and decide takings claims that stem from restrictions imposed by state and local governments, but property owners may also bring those claims in federal district courts as a so-called Section 1983 action under the Civil Rights Act of 1871.²⁴ However, in many instances, before a property owner may pursue a taking claim in federal court against a state or local government (whether or not the claim is based on section 1983), he or she must exhaust approaches for obtaining compensation at the state level.

The various doctrines that govern how the courts deal with regulatory takings claims in many cases translate into a lengthy legal process that is potentially

fraught with difficulties for property owners. Criticisms of the current approach abound, and calls for changing the whole system have come in a steady stream before the Congress.

Criticisms of the Status Quo

As noted earlier, regulatory takings claims against the federal government are infrequently brought and rarely successful. Some people interpret those statistics to show that the government seldom violates the takings clause. But to advocates of property rights proposals, those facts suggest that the current legal system is unfair and contrary to the spirit of the Constitution's prescripts. Proponents of changing the system criticize the current approach to takings on several fronts. They argue that it is often difficult to get a court to hear a claim on its merits and that when claims are heard, they rarely succeed. Nevertheless, it is difficult to predict how any one claim will be decided. Furthermore, they contend that the current system provides inadequate incentives and procedures for regulators to avoid actions that might constitute a taking.

Successful Takings Claims Are Few and Difficult to Achieve

The scarcity of successful takings claims may be attributable in large part to two factors. First, getting a court to hear a taking claim can be difficult. Second, courts evaluate claims according to a body of case law that is generally tolerant of actions by government that address legitimate public objectives. With that foundation for their decisions, courts rarely find that a regulatory taking has occurred.

Many Cases Are Dismissed Without a Decision on Their Merits. As the earlier discussion on ripeness noted, courts may refuse to judge the merits of a claim unless it is ripe for adjudication. Reaching that stage is not always easy. Most regulatory agencies do not define generally permissible levels of property use; usually, they decide whether a specific use of the land is permissible and whether to grant that permission—in some cases, by approving or denying an application for a permit. If the agency rejects the first proposed

21. 28 U.S.C. 1491, 24 Stat. 505 (1887).

22. The quotation is from the Administrative Procedures Act of 1946, 5 U.S.C. 706(2), which governs the judicial review of agencies' decisions.

23. See Robert Meltz, "*Property Rights*" Bills Take a Process Approach: H.R. 992 and H.R. 1534, CRS Report for Congress 97-877A (Congressional Research Service, June 24, 1998), p. 5.

24. 42 U.S.C. 1983.

use of the land, the property owner may modify the proposal and reapply for the permit. Thus, multiple applications may be necessary to determine precisely what property uses the agency will allow.²⁵ And if the agency has an administrative process for appealing regulatory decisions, the courts may require property owners to go through that process before they are willing to hear the case.²⁶

For a property owner, reaching such a stage of finality and specificity is often time-consuming and costly. Those factors, together with the delays and expense that in many instances are associated with litigation, may deter people with modest means or modest claims from pursuing legal remedies. Indeed, for many property owners, takings litigation is more likely to worsen their situation than to improve it. Owners who win a claim receive compensation, including an amount that covers some legal expenses. But owners who lose bear their costs of litigation, which can be substantial.

Criticism of the courts' application of the ripeness doctrine and of the requirement for exhausting other remedies stems primarily from takings claims involving land-use restrictions of local governments.²⁷ The burden that the ripeness doctrine imposes on takings claims based on federal regulations is less obvious because the Court of Federal Claims is usually willing to consider claims after only a single permit has been denied. Even so, some people argue that getting into court is still costly and time-consuming because getting through the permitting process even once can be burdensome, particularly for permits related to the Endangered Species Act.²⁸

25. See Meltz, "Property Rights" Bills, pp. 14-15.

26. Examples of these kinds of procedural requirements appear in several Supreme Court decisions made during the 1980s: *Agins v. City of Tiburon*, 447 U.S. 255 (1980); *San Diego Gas and Electric v. City of San Diego*, 450 U.S. 621 (1981); and *Williamson County Regional Planning Commission v. Hamilton Bank*, 473 U.S. 172 (1985). Each of the cases involved a local zoning restriction.

27. Roddewig and Duerkson, *Responding to the Takings Challenge*, p. 5.

28. Barton H. Thompson Jr., "The Endangered Species Act: A Case Study in Takings and Incentives," *Stanford Law Review*, vol. 49, no. 2 (January 1997), pp. 305-380.

Gauging the extent of the barriers that property owners face when they try to get a taking claim heard can be difficult—whether the claim is being made at the federal or the state or local level. Information concerning the number, nature, and outcome of takings claims at the state level is quite limited. Information concerning the number, nature, and outcome of takings claims at the federal level is scarce as well, but some observers suggest that the federal courts often dismiss cases on the basis of a lack of ripeness, the abstention doctrine, or a failure to exhaust administrative or state remedies.²⁹

Federal Compensation Awards Are Infrequent. For the most part, a regulatory taking claim is an unlikely source of compensation for the perceived adverse effects of federal regulation. Once a court hears a claim, it usually decides the suit in favor of the government. Large reductions in the property's value notwithstanding, courts typically reject takings claims out of deference to the public interest behind the government's action or for other reasons.

Regulatory Takings Can Be Difficult to Predict

The outcome of any particular regulatory taking claim can be hard to predict. One reason for that uncertainty is that the courts' inquiries depend heavily on the facts of each case, and all of the relevant facts may not be known until a court is ready to hear the case. That point may be reached many years after the use of a property was first restricted by a government's regulatory action. Once the necessary information is available, the court must weigh the facts in the light of the factors that the Supreme Court has offered in guidance. A frequent criticism of the current approach is

29. See, for example, Brian Blaesser, "Closing the Federal Courthouse Door on Property Owners: The Ripeness and Abstention Doctrines in Section 1983 Land Use Cases," *Hofstra Property Law Journal*, vol. 2 (1988), p. 73-163; and Gregory Overstreet, "The Ripeness Doctrine of the Taking Clause: A Survey of Decisions Showing How Far Federal Courts Will Go to Avoid Adjudicating Land Use Cases," *Journal of Land Use and Environmental Law*, vol. 10, no. 1 (Fall 1994), pp. 91-126.

that it is difficult to predict which factors the court will emphasize and how they will be applied.³⁰

Agencies Regulate Excessively Because They Have Inadequate Incentives to Avoid Takings

One way to limit regulatory takings is for agencies to avoid the actions that may cause them. Some critics of the current approach to takings argue that when agencies are making regulatory decisions, they fail to adequately weigh the consequences of their proposed actions for property rights. For that reason, say those opponents, agencies' decisions in many instances unnecessarily infringe on those rights.

Critics of the status quo suggest two reasons for such infringements: lack of forethought and lack of incentive. They argue that agencies should be required to better analyze the implications of proposed regulatory decisions to determine how those decisions might affect property rights and to identify other options that might lessen the burden on property owners. Moreover, the critics point out that agencies lack a financial incentive to avoid actions that result in takings because usually they do not pay the compensation awards that their regulatory actions sometimes generate.

30. See, for example, Peterson, "The Takings Clause," p. 1304; and Meltz, *When the United States Takes Property*, p. 40.

Proposals for Change

The criticisms discussed above have led the Congress to consider several proposals concerning property rights during recent sessions. Abstracting from the precise language of particular bills, this study analyzes the most frequently proposed methods of achieving the two central objectives of such proposals: increasing access to compensation and discouraging government agencies from pursuing actions that might infringe on property rights and values. The chapters that follow cover the general categories of objectives below:

- o Establish a statutory compensation program—that is, one enacted by the Congress—that uses broader eligibility criteria than the courts now employ to decide takings claims based on the Fifth Amendment.
- o Streamline the requirements that property owners must satisfy to have the merits of their claims decided by a federal court.
- o Increase the requirements for analysis and reporting that federal agencies must satisfy before they may pursue actions that could affect property rights or values.
- o Pay the compensation awarded under the statutory eligibility programs from the budget of the federal agency whose action triggered the award.

Increasing Access to Compensation

The various legislative property rights proposals that have come before the Congress attempt to deal with concerns about fairness and the distribution of regulatory costs. Courts that hear regulatory takings claims currently confront those same issues. As the Supreme Court noted in *Armstrong v. United States* in 1960:

The Fifth Amendment's guarantee that private property shall not be taken for a public use without just compensation was designed to bar government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.¹

Yet despite the courts' stated focus on fairness, some people maintain that the current judicial "remedy" for a taking is unfair and offers inadequate protection from what they consider to be burdensome regulatory actions by government. They point out that the courts rarely find such actions to be takings, even when the actions eliminate much of a property's value. As a remedy, some people propose that the Congress adopt a statutory requirement for compensation—that is, one provided by statute rather than under the Constitution. A statutory requirement would make it easier, relative to the current judicial remedy, for property owners to qualify for compensation.

This chapter examines proposals that set out statutory compensation regimes, their goals, and how

they might work in practice. In particular, it focuses on reduction-in-value thresholds for eligibility for compensation, both in terms of how to compute the reductions in value and the fairness of such a strategy. It also explores the nuisance exception and the expansion of rights eligible for compensation.

Adopting a Reduction-in-Value Threshold Criterion

Property values play an important role in the debate over regulatory takings. Both the takings jurisprudence of the courts and many of the proposals that advocate modifying the way property owners are compensated consider changes in property values to be an indicator of the severity of a regulation, a major factor in eligibility for compensation, and a logical measure of the compensation that might have to be paid. However, property values play a more pivotal role under the proposals than they do within the courts' takings analysis.

Many of the property rights proposals include a reduction-in-value criterion, or threshold, for determining whether a property owner would be eligible for compensation following a regulatory action. Under that criterion, actions that reduced a property's fair market value by more than a set percentage would trigger a statutory obligation to compensate the owner provided no exceptions applied. (Box 3 defines fair market value.) Thresholds in the proposals range

1. 364 U.S. 40 (1960).

from 10 percent to 50 percent of the property's initial value. Implicit in the choice of a percentage are several policy considerations (see Box 4).

Box 3.
What Is the "Fair Market Value"
of a Property?

The *Uniform Standards of Professional Appraisal Practice* defines "fair market value" as follows:¹

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed and well advised, and acting in what they consider their best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

1. Dennis S. Tosh and William B. Rayburn, *Uniform Standards of Professional Appraisal Practice: Applying the Standards*, 4th ed. (Chicago: Real Estate Education Co., 1996), p. 117.

Most proposals call for comparing the value of the property just before the government restriction was imposed with the value just afterward. The extent of the reduction in value that ensued would be measured in percentage terms—that is, the proportion of the initial value of the property that the regulatory action eliminated. The calculation would be:

$$\frac{\text{Value before the action} - \text{Value after the action}}{\text{Value before the action}}$$

Under the proposals, owners who qualified for compensation would receive the estimated reduction in the value of their property as an award. In addition, the government would reimburse those owners for their legal expenses and pay compound interest on the award from the date of the taking.

In the current system, courts sometimes consider the effect that a regulatory action has on property values when they decide a taking claim. However, they have never articulated an explicit reduction-in-value threshold—other than the total elimination of the property's value—that would signal that a taking might have occurred.²

Scholars have tried to develop an implicit threshold from the courts' various takings decisions. However, they have been unable to move much beyond crude inferences because the courts rarely compute actual reductions in value.³ One review of takings cases suggested that federal courts were unlikely to find a taking if the percentage reduction in value that they calculated was less than 80 percent.⁴ Yet even if the courts determine that a percentage reduction exceeds 80 percent, they do not always find that a taking has occurred. Other factors that they deem more sig-

-
2. The Supreme Court's decision in *Lucas v. South Carolina Coastal Council* makes it clear that the complete elimination of property value is a *per se* taking unless exceptions apply.
 3. Richard J. Roddewig and Christopher J. Duerksen, *Responding to the Takings Challenge: A Guide for Officials and Planners*, Planning Advisory Service Report No. 416 (Chicago: American Planning Association, 1989), p. 2.
 4. William S. Walter, "Appraisal Methods and Regulatory Takings: New Directions for Appraisers, Judges, and Economists," *Appraisal Journal* (July 1995), p. 338.

Box 4.
Choosing a Reduction-in-Value Threshold

In many property rights proposals, a precise reduction-in-value threshold is perhaps the most important feature of the eligibility criteria for compensation for regulatory infringement. In other words, federal regulatory actions that caused a reduction in the value of an owner's property that in percentage terms was smaller than the threshold typically would not qualify the owner for compensation. Actions that caused reductions in value that exceeded the threshold would trigger the compensation requirement (provided no exceptions applied). The various bills that propose to legislate reduction-in-value thresholds for regulatory compensation span a fairly wide range—they call for thresholds from as low as 10 percent to as high as 50 percent of a property's initial value.

The reduction-in-value threshold is one way to define what constitutes an unfair regulatory burden—that is, one that the government ought to bear and that it would bear if any of the legislative proposals containing such a provision was adopted. A very low threshold implies that the government should have only a very limited right to impose regulatory burdens on property owners. A higher reduction-in-value threshold, together with certain exceptions to eligibility for compensation that would apply regardless of the size of the property owner's loss, suggests that the government enjoys a broader right to impose regulatory burdens.

The choice of a reduction-in-value threshold may also depend on the ability to measure changes in property values caused by government regulation and

on society's preferences regarding possible mistakes in those measurements. The more precise such estimates are, the more certain the courts can be that a given property owner truly qualifies for compensation under the proposed eligibility criteria. With imprecise estimates, some property owners who are eligible will be denied compensation, and some property owners whose losses are, in fact, below the threshold will receive compensation. On the one hand, if it is more important that property owners not be denied compensation when they are actually eligible, the reduction-in-value threshold should be set fairly low. On the other hand, if it is more important that property owners not be compensated when they are truly ineligible, then the reduction-in-value threshold should be set higher. A further consideration regarding imprecise estimates of property value changes caused by regulatory actions is that a higher reduction-in-value threshold gives the government the benefit of the doubt about whether or not it owes compensation.

Some observers argue that the choice of a reduction-in-value threshold is irrelevant. They contend that if losses were measured only on the basis of the portion of a property that was directly affected by a regulation, as many property rights proposals would do, property owners could calculate a reduction in value of any size simply by choosing the "appropriate" affected portion. The validity of that argument depends on how the courts decide which portion of the property is, indeed, affected by the regulatory action in question.

nificant, such as the rationale prompting the government's action, can preclude such a finding.⁵

In addition to the level of the reduction-in-value threshold, the proposals evoke other questions whose answers would directly affect property owners' eligibility for compensation.

**What Is the Relevant Property
Whose Value Is Reduced by
the Regulatory Action?**

There are several ways to calculate the percentage reduction in the value of a property that a government's regulatory action has caused. Most property rights bills would use only that part of the property that was directly affected by the government's restriction. Such an approach is a departure from the method that the courts apply, which usually evaluates reductions in

5. Ibid., pp. 337-338.

value on the basis of the entire property. The absolute reduction in the value of the property is generally the same under either approach; however, the percentage reduction in value can be very different if a restriction directly affects only a portion of the whole. The percentage reduction in value might be quite small when calculated on the basis of the entire parcel. But if it was calculated only on the basis of the affected portion, the loss might be nearly total—that is, the government's regulatory action would have rendered the affected portion of the property worthless.

The stringency of the proposals' eligibility criteria for statutory compensation may depend on how reductions in value are determined. Consider the following example. A person buys 10 acres of property, expecting to build a subdivision. After purchasing the land, the owner discovers that an endangered species inhabits the trees on one acre of the property. The government will not permit construction on that acre of land, so the owner may develop only the nine remaining acres. Assuming that the property can be developed, the land is worth \$1,000 an acre; if it cannot be developed, it is worth only \$200 an acre.

The discovery of the endangered species on the one acre of land has reduced the value of that acre by \$800. Evaluated on the basis of the parcel as a whole, the percentage reduction in value is \$800 divided by \$10,000, or 8 percent of the initial value of the entire property. Evaluated on the basis of the affected portion, the percentage reduction in value is \$800 divided by \$1,000, or 80 percent. Thus, even without other changes in the criteria for compensating property owners, use of the affected-portion method of calculating reductions in a property's value could increase the number of regulatory effects that would qualify for compensation, relative to the current standard.

Giving property owners enough latitude to specify the portion of their property that the government's action had affected would mean that any given absolute reduction in the property's value could be translated into a percentage reduction large enough to qualify those owners for compensation.⁶ For example, a

property owner might allege that a government restriction had eliminated a portion of his or her property in the form of a particular property right—and therefore eliminated the entire value of that right. In *Andreus v. Allard*, which involved a federal ban on the sale of eagle parts, the Supreme Court held that denial of one property right—that of selling the feathers—was not a taking if other "sticks in the bundle" remained (that is, if other rights of ownership related to the eagle, such as the right to pass property to one's heirs, were intact).⁷ Under the constitutional takings jurisprudence, a taking may occur if a regulation interferes with certain essential rights (including the rights to exclude others and to dispose of one's property).⁸ But if fundamental rights are not at issue, the courts have been reluctant to evaluate claims of takings that are based solely on a regulation's effect on a particular right.⁹

Evaluating property owners' losses from a regulatory action on the basis of the reduction in value of the entire parcel of land brings its own set of problems. In the first place, it would permit large absolute reductions in the property's value to go uncompensated—because the reduction-in-value threshold might not be triggered. And it is not always clear how the parcel as a whole should be defined. For example, when a large property was sold or developed in stages, would the relevant parcel be the entire original property, or would it simply be the latest part of the property that was being sold for development? The outcomes of regulatory takings cases involving wetlands have been decided by different answers to that question.¹⁰

6. Statement of Carol M. Rose, Professor, Yale Law School, in U.S. Senate, *The Right to Own Property*, hearings before the Senate Committee on the Judiciary, S. Hrg. 104-535 (April 6, 1995), p. 91.

7. 444 U.S. 51 (1979).

8. Cases in which interference with those rights contributed to a finding of a taking include *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); *Hodel v. Irving*, 481 U.S. 704 (1987); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982); and *Babbitt v. Youpee*, 117 S. Ct. 727 (1997).

9. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978); *Keystone Bituminous Coal Ass'n. v. De Benedictis*, 480 U.S. 470 (1987); and *Andreus v. Allard*, 444 U.S. 51 (1979).

10. See, for example, *Loveladies Harbor, Inc. v. United States*, 21 Cl. Ct. 153 (1989).

What Is the Relevant Change in the Value of the Property?

Although computing changes in property values seems a relatively straightforward exercise, it is actually more complex than it might at first appear. The property rights proposals call for comparing prices before and after a government's regulatory action. In practice, the relevant change in the property's value is probably the difference between its value without the government's restriction and its value with that restriction. (In other words, estimating the reduction in value requires examining the property's worth when the restriction definitely does not apply and when it does.) The two calculations—the one that the proposals specify and the one that is now carried out—would not always lead to the same result. One reason for any differences is that the value of the property just before the final regulatory decision may reflect uncertainty about the nature or likelihood of the restrictions that the government might impose in the future.

The distinction between the two approaches to computing property values can be illustrated graphically (see Figure 3). For simplicity's sake, the pattern of price changes that the figure depicts assumes no changes in the other factors that might affect property values over time. Most of the proposals would probably measure the economic impact of a regulatory action by comparing the value of the property when a restriction did not apply with the value when the restriction did apply; that difference in value is represented by the arrow marked "D" in Figure 3.

The highest value shown in the figure represents the situation before the law instituting the regulatory action is enacted—when there is no expectation of regulation. Once the law is considered and passed, however, the value of the property declines (arrow A); the drop reflects the increased chance that the property's use may be restricted. Note that the value of the property does not fall to the lowest point because of the remaining uncertainty about how the regulation will be applied. In other words, at that point (that is, when the law is enacted), the value of the property is discounted to reflect a *risk* of regulation, not the *certainty* of regulation.

Once the agency writes the rules and regulations necessary to implement the law, the price of the regulated property may change again. If the rules and regulations were more restrictive than was generally expected when the law was enacted, the value of the regulated property might fall again (arrow B). If the rules and regulations were less restrictive than expected, the value of the regulated property might rise. If the owner of the property applied for a permit to use the land in a particular way and the agency denied the permit (on the basis of the rules and regulations it implemented as a result of the law), the value of the property would be likely to fall to reflect the certainty that it would be regulated (arrow C). In contrast, if the permit was approved and the law had no effect on the use of the property, the property's value would rise to the level it had reached before the enactment of the law.

What Is the Relevant Government Action?

The evolution of a regulatory program from its initial authorization by the Congress to the final imposition of restrictions on particular properties can induce multiple changes in property values over time (see Figure 3). If property values are being affected at several points in time, what is the appropriate event for determining whether the property owner is eligible for compensation?

Under the present takings regime, a claim for compensation usually arises at some point after an agency begins to apply restrictions directly to specific properties. That statement covers restrictions that are applied to properties on a case-by-case basis—for example, instances in which agencies deny applications for permits authorizing certain uses of particular pieces of land. For a very small number of restrictions, the takings claims might occur after the general regulations became final (because the full effect of the regulation on property values would be complete at that time).

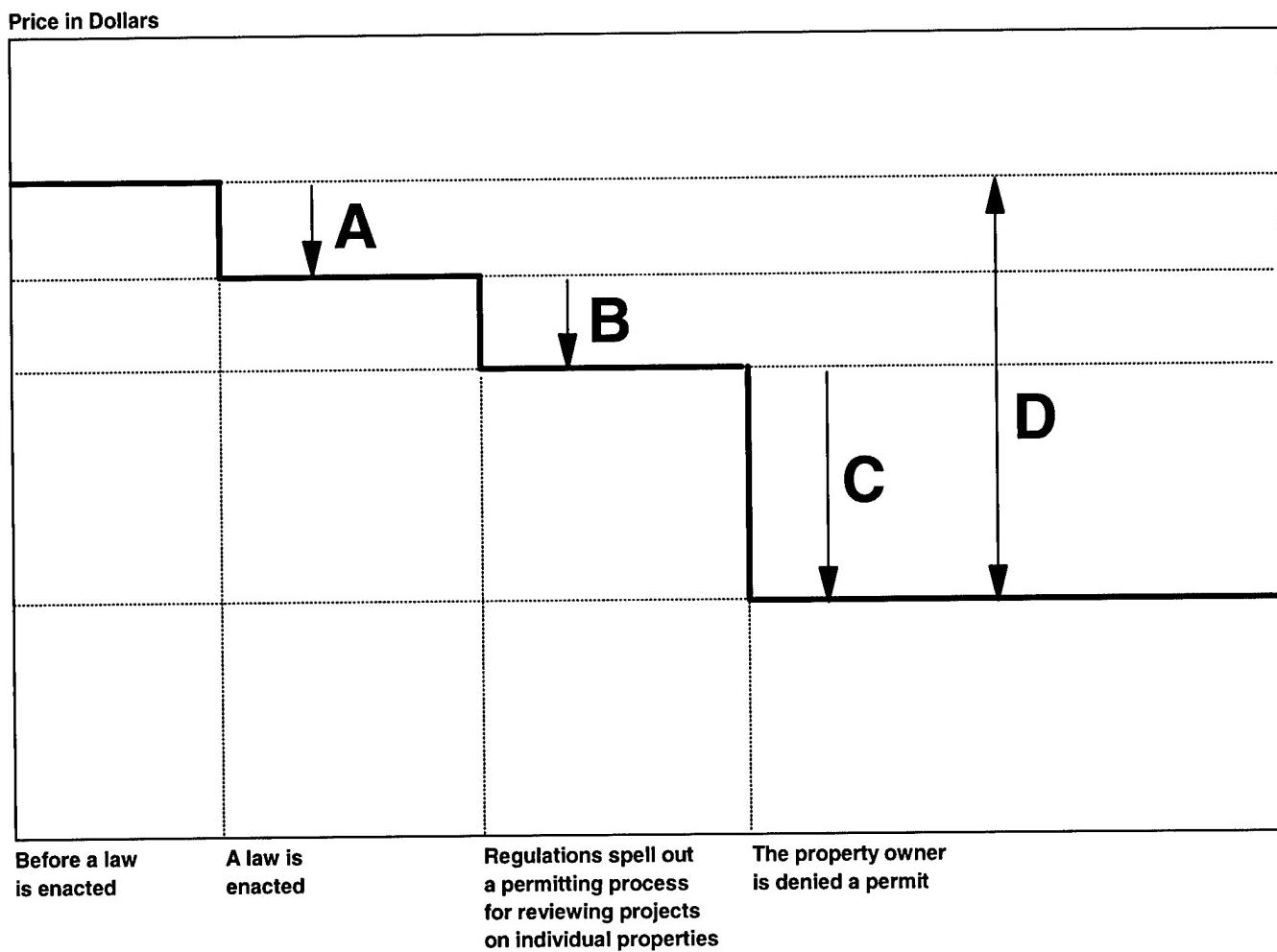
Under the property rights proposals, the appropriate event for determining compensation is less clear,

for two reasons. First, the proposals define regulatory actions more broadly than the courts typically define them. Second, some proposals would relax the ripeness requirements that currently discourage property owners from filing takings claims until there is clear evidence of what activities the agency will permit on the particular property under the regulation. Indeed, the provisions of some property rights proposals would allow compensation claims to be filed in the

initial stages of the regulatory process. Although the property rights bills are not specific as to timing, filing might well be allowed after the announcement of a new regulatory program but before regulations were applied to particular properties. Claims of that sort are very rare in the present system and typically fail.

Allowing compensation claims to be filed at an earlier stage than is now possible has both advantages

Figure 3.
Changes in the Value of a Property Caused by a Regulatory Program (Over time)



SOURCE: Congressional Budget Office.

NOTE: The figure assumes that the regulatory program is the only influence on prices. "A" is the change in the price of the property that reflects the shift in expectations about its uses at the time a law authorizing a regulatory program is enacted. "B" is the change in the property's price that reflects the shift in expectations when new regulations establish a permitting system for converting the property to different uses. "C" is the change in the property's price that reflects the shift in expectations when a permit to alter the property is denied by the regulatory agency. "D" is the difference between the value of the property if a permit is granted and the value if a permit is denied.

and disadvantages. On the one hand, it might permit property owners to recover compensation for any initial losses in the value of their property caused by the realization that a heretofore unregulated activity might soon be regulated. On the other hand, such losses would be speculative and might be difficult to prove. Under the constitutional takings jurisprudence, claims that are filed too early are usually dismissed as premature or simply fail because at that point the property owner cannot satisfy the requisite burden of proof.

Like the news of the enactment of a law restricting land use, the enactment of a proposal for a statutory compensation system is information that will affect the value of property. If compensation for the effects of a government's regulatory actions was easily available, the sales prices of property would probably not decline by much, if at all, in response to new regulations. Because regulation-induced reductions in the value of a property would be recoverable, such property need not be sold at a discount—presuming that the probability of obtaining compensation was very high and the cost of pursuing it very low. Indeed, the availability of compensation would probably increase the value of many properties that formerly sold at a discount because they were subject to federal regulation.

Computing Reductions in Property Value Under the Proposals

Proposals that adopt a reduction-in-value criterion to determine a property owner's eligibility for compensation require that the value of a property be estimated twice—once, assuming that the regulatory action at issue does apply, and again, assuming that it does not. The difference in those estimates is the regulation-induced reduction in value.

The proposals assume to some extent that developing the estimates is practical, cost-effective, and relatively without controversy. That assumption is not on its face unreasonable; in many markets, the prices of goods and services are readily observable. But in the real estate market, prices are not readily observ-

able and are typically estimated by real estate appraisers. Prices are particularly difficult to observe in the market for undeveloped land, in which properties are quite varied and sell infrequently. As a result, complex appraisals may be necessary to estimate the value of undeveloped land. Before any appraisal can be conducted, however, the likely uses of the property must be determined because those uses will profoundly affect the property's value.

Determining the Likely Uses of the Property

Estimating a regulation-induced reduction in a property's value requires determining how the property would be used in a context in which the regulation was not applied and one in which it was. In the case of some properties, their uses in either context would be obvious and relatively indisputable; in others, uses in one or both of the contexts might be highly uncertain and subject to controversy. In both instances, the courts would be the final arbiter of decisions concerning which potential uses would be reasonable.

Several considerations are involved in determining the use of a property in the absence of an agency's regulatory action. A reasonable starting point is to assume that the property would have been used for the purpose suggested by the owner, perhaps as described in a permit application that the agency denied. First, however, it must be verified that such a use would be physically and economically feasible and would comply with all other laws and regulations—federal, state, and local—that might apply to the property. (State and local regulations, rather than federal restrictions, are often the binding constraint on the way a piece of property may be used.)

However, the property use suggested in a permit application may not represent the use that would have occurred had the regulation not applied—a possibility that might result in undercompensation. The property owner may have submitted a modest proposal to the government in the hope of increasing the chances that it would be approved. If, instead, the proposal was rejected, it might be appropriate, in trying to value the loss that had occurred, to consider a plan that was more ambitious than the one proposed, because with-

out the regulatory program the owner's proposal might have been larger in scale.

Determining how the property would be used assuming that the government restriction was applied is, in many cases, more difficult. Suppose that the owner proposed to convert the property to a new use and the government refused to issue a permit to allow that use. The most convenient assumption to make is that because of the government's restriction, the property would continue in its current state. But that assumption might not be reasonable. The government's rejection of one specific use does not mean that it would reject all proposed changes in the use of the property. An agency might well allow a less intensive development project. The problem for the owner—and for those attempting to estimate the reduction in the property's value as a result of the restriction—would be to identify the project that the government would permit.¹¹ Under the present takings jurisprudence, the courts may dismiss a claim for compensation as not ripe for a decision if they cannot identify the permissible uses of the property. Under a statutory compensation system such as those proposed in the various property rights bills, the requirements of ripeness might be relaxed. (However, a court could still reject a claim for lack of evidence—because it would not have the information necessary to gauge the reduction in value. Alternatively, the court might conjecture about uses of the land that the government would be likely to permit.)

The discussion above deals with regulatory actions that prevent owners from converting properties to new uses. Another type of restriction might force property owners to change the current use of their property. For example, possible future restrictions on non-point-source pollution, such as agricultural runoff, might prove so costly to implement that the current use of the property would no longer be profitable and the owner would have to convert it to another use—one that was less profitable. To measure the resulting reduction in value, the property owner would first have to demonstrate that the restriction was so

onerous that continuing the current use of the property would be uneconomical and then identify the most profitable alternative use of the property that was permissible.

Estimating Changes in Property Values

Once the uses of a property (both with and without the restriction) had been established, the next task in estimating the reduction in value would be to estimate the value of the property under each of those potential use scenarios. That task would most likely fall to real estate appraisers. Real estate appraisal is a mix of science and art.¹² Appraisers use a variety of techniques that provide an objective framework to estimate the market value of a piece of property.¹³ Two commonly used methods of valuing undeveloped land—the "science" of such work—are the comparable-sales and income capitalization approaches. The comparable-sales approach uses information from recent sales of properties that are similar to the one being valued. The appraiser identifies several such properties that have recently been sold and adjusts their prices for any relevant differences with the property being valued. Those sales prices are then used to estimate the value of the property in question.

The comparable-sales approach is most reliable when properties are physically similar, are located near each other, and sell frequently in markets with many well-informed buyers and sellers. If those conditions hold, as they do for many residential properties, the appraiser does not have to make many adjustments to the observed prices to infer another property's current value. If market conditions depart from the ideal, however, the sale prices of other properties convey less information about and are less reliable predictors of the current market value of the property in question. In that case, the appraiser must make more adjustments, and there is greater uncertainty about the estimated value of the property.

11. The uncertainty inherent in attempting to determine the permissible uses of a property is demonstrated in the risk-shielding approach that some developers use in their purchases of undeveloped land. In many instances, they make the purchase of a piece of property contingent on the approval of all necessary government permits for the desired development.

12. This section is based in part on Steven P. Smalley, "Appraisal: Science or Art?" *Appraisal Journal* (April 1995), pp. 165-171; and House Committee on Government Operations, *The Barnard Report: Impact of Appraisal Problems on Real Estate Lending, Mortgage Insurance, and Investment in the Secondary Market*, H. Rpt. 99-891 (1986).

13. See James D. Eaton, *Real Estate Valuation in Litigation* (Chicago: Appraisal Institute, 1995).

As noted earlier, the kinds of property involved in compensation claims against the federal government are often ones whose value is difficult to estimate. In many instances, federal takings claims involve undeveloped land. The market for such land generally has few participants, properties with diverse attributes, and less frequent sales than the markets for developed land. In situations in which the data necessary to use the comparable-sales approach are poor or unavailable, appraisers may turn to the income capitalization approach to valuing property.

The income capitalization approach assumes that the fair market value of a property equals the discounted value of the income that the property could produce. The appraiser estimates the expected future stream of income from the property and then discounts it to reflect the time value of money (including the risks associated with that flow). The technique requires a reliable estimate of future income and a discount rate that is appropriate for the risk of the development being contemplated.

To identify the expected stream of income that a property could generate, the appraiser must first determine the property's "highest and best use"—that is, a use of the property that is physically, financially, and legally possible and that generates the greatest income after adjusting for the time value of money. For situations involving compensation claims, the highest and best use of an undeveloped property usually involves some form of development.

Estimating the future stream of income from a property requires a large number of assumptions. For vacant land, the appraiser must estimate the cost and time required to construct improvements and the level and timing of the income that they might generate. That estimated stream of income is then converted to a present value by using a discount rate selected by the appraiser. Because an appropriate discount rate is not always obvious and the present value of a future income stream is sensitive to whatever assumption is made about that rate, an appraiser's choice of discount rate can be controversial.

Those kinds of subjective decisions represent the "art" of appraisal, and they necessarily multiply when

information is limited. With extensive information, different appraisers are likely to arrive at similar estimates of the value of a property. But when good data are scarce, more subjective determinations are necessary.

The characteristics of the market for undeveloped land limit the precision of appraisals based on the comparable-sales or income capitalization techniques. As market conditions depart from the ideal, the relationship between the sales prices of other properties and the fair market value of the property in question becomes more tenuous. The appraiser must then make more adjustments to address differences in time, location, and physical characteristics. With the income capitalization approach, a wide range of plausible assumptions is available, which would affect the expected stream of income and the appropriate discount rate to apply. In such circumstances, two appraisers using different but nevertheless plausible assumptions about future income or discount rates could arrive at quite different estimates of a property's value.

The Effect of Uncertainty About Estimates of Property Value Losses

The precision of estimated changes in property values is a major consideration in assessing the practicality of the various property rights proposals that have circulated in recent years—as noted earlier, it is more of an issue than in the current system. Today, changes in the value of properties are only one of several factors that the courts consider in deciding a taking claim, and estimates of those changes are rarely generated. Courts seldom find that a given regulatory action is a taking. As a result, it is usually unnecessary for them to quantify the losses that the property owner experiences for the purpose of determining just compensation.

In contrast, many property rights proposals would make the estimated reduction in the value of a property the primary criterion for determining whether a property owner would be eligible for compensation. Several of the proposals feature relatively low reduction-in-value thresholds. If the proposals were enacted, more claims would be likely to result in com-

Box 5.
Florida Rock Industries, Inc. v. United States

In this case, Florida Rock Industries applied for a Section 404 permit under the Clean Water Act that would allow it to mine limestone in an area designated as wetlands. The Army Corps of Engineers denied the application, and the company filed a taking claim in the U.S. Court of Federal Claims. The question of whether the denial of the permit was a taking hinged largely on the value of the property and whether the denial totally eliminated it. Disputes over the various estimates of the property's value have resulted in three separate trials and two reversals on appeal in over a decade of litigation.¹ Chief Judge Loren Smith of the U.S. Court of Federal Claims summarized the problem in 1990:

In many cases, the economic impact of a regulation is measured by comparing the fair market value of the property before the government action with the fair market value of the property after the govern-

ment action. Thus, the litigation on this issue often becomes a battle of real estate appraisers. . . . The Court is faced with conflicting real estate appraisals, prepared by two highly credible experts. Both hold [Member of the Appraisal Institute] designations from the American Institute of Real Estate Appraisers, and are certified under the Institute's continuing education program. Both compared the subject property with other acreage within what was identified as the two-by-ten-mile strip.²

The estimates of the property's market value produced by the two sides in the dispute were significantly different. Appraisers for Florida Rock Industries estimated its worth at \$500 an acre, whereas the government's appraisers estimated that on the basis of comparable sales, the property was worth at least \$4,000 an acre. The disparity in estimates was the result of disagreement over the so-called highest and best use of the property and the interpretation of the term "fair market value." (For example, appraisers for Florida Rock argued that the government's comparable-sales estimates were aberrations, made by uninformed or speculative buyers.)

1. Florida Rock IV (*Florida Rock Industries, Inc. v. United States*, 18 F.3rd 1560 (Fed.Cir., 1994)) reversed Florida Rock III (*Florida Rock Industries, Inc. v. United States*, 21 Cl.Ct. 161 (1990)), which was tried after the Federal Circuit in Florida Rock II (*Florida Rock Industries, Inc. v. United States*, 791 F.2nd 893 (1986)) had reversed Florida Rock I (*Florida Rock Industries, Inc. v. United States*, 8 Cl.Ct. 160 (1985)). A decision in Florida Rock V, which was argued in November 1996, is still pending.

2. *Florida Rock Industries, Inc. v. United States*, 21 Cl. Ct. 161 (1990).

pensation awards.¹⁴ Consequently, the need to determine the extent of property owners' losses would arise much more often than it does now. As discussed above, those estimates would include partial interests in a property as well as the entire parcel, which might make valuation more complex and more difficult. As uncertainty over an owner's eligibility for compensation increased, both sides in a compensation claim would have a greater incentive to expend resources on disputing each others' appraisals. Even under the present takings claim system, such controversies are no small problem (see Box 5).

Contention over property valuation could lead to a significant bottleneck in the resolution of some compensation claims under the property rights proposals. Courts would inevitably encounter estimates prepared by well-qualified, reputable appraisers representing the property owner and the government that differed significantly in their conclusions. Any aspect of an appraisal that required professional judgment or subjectivity would be potentially subject to challenge. Possible areas of dispute include the following:

- o The appropriate portion of the property on which to calculate the reduction in value;
- o The definition of a comparable property and how the prices of comparable properties should be adjusted;

14. This discussion does not make assumptions about changes in regulatory activity. In fact, agencies are likely to adapt to the extent possible, which could reduce the number of potential claims (see Chapter 6).

- o The "highest and best use" of a property and the uses that the government is willing to allow;
- o The likely income potential of future development of undeveloped property; and
- o The appropriate discount rate with which to compute the present value of the property's potential future stream of income.

The Potential for Biased Estimates of Reductions in Value

The potential lack of precision in property valuation leaves open the possibility of biased estimates. To obtain compensation under a statutory eligibility criterion, property owners would have to demonstrate that a government's regulatory action had reduced the value of their property by at least the specified threshold percentage. Appraisers hired by either side in a compensation dispute could feel pressure to find a level of losses that would favor their client's position. Alternatively, the litigants in a compensation claim could "shop around" until they found an appraisal that fit their particular needs.

Biased appraisals have troubled the federal government in the past. Incompetent and fraudulent appraisals were factors in the savings and loan crisis and the subsequent costly government bailout.¹⁵ In addition, faulty real estate appraisals for loans guaranteed by the Veterans Administration and the Federal Housing Administration have contributed to hundreds of millions of dollars in loan losses for the government.¹⁶ Furthermore, controversies over the valuation of conservation easements, and the tax write-offs they can generate, have been a problem for the Internal Revenue Service.¹⁷

15. Frank A. Vickory, "Regulating Real Estate Appraisers: The Role of Fraudulent and Incompetent Real Estate Appraisals in the S&L Crisis and the FIRREA Solution," *Real Estate Law Journal*, vol. 19 (Summer 1990), pp. 3-18.

16. House Committee on Government Operations, *The Barnard Report*, p. 60.

17. Stephen J. Small, *The Federal Tax Law of Conservation Easements* (Washington, D.C.: Land Trust Alliance, 1994), pp. 17-5 and 19-3.

In response to the apparent need for better and more impartial appraisals, the federal government mandated a system of appraiser licensing at the state level when it enacted the Financial Institutions Reform and Recovery Enforcement Act of 1989. Yet despite those important reforms, concerns about potentially faulty appraisals remain.¹⁸ Some empirical studies have shown that in a number of instances, appraisals are subject to biases that allow loan applicants to meet certain conditions such as critical loan-to-value thresholds (limitations on the ratio of a loan to the value of a property that is being purchased).¹⁹ There have also been some continuing complaints about the partiality of appraisals prepared in connection with mortgages insured by the Federal Housing Administration.²⁰ Similar pressures could surface in the context of a system in which eligibility for regulatory compensation depended significantly on the satisfaction of a reduction-in-value threshold.

The Fairness of Proposed Reduction-in-Value Thresholds

A principal goal of proposals that seek to change the current system of compensation for regulatory takings claims is to ensure that the government compensates owners of property when its restrictions impose burdens. The success of such efforts can be evaluated by asking two questions: Are property owners who suffered losses being compensated? And are compensation payments reasonably related to the loss suffered?

18. John K. Rutledge, "Conflicts of Interest or 'Thou Shalt Not Steal' Revisited," *Real Estate Issues* (December 1994), pp. 15-19.

19. David K. Horne and Eric Rosenblatt, "Property Appraisals and Moral Hazard" (paper presented at the midyear meeting of the American Real Estate and Urban Economics Association, 1996); Elaine M. Worzala, Margarita M. Lenk, and William N. Kinnard, "The Impact of 'Client Pressure' on the Appraisal of Commercial Properties" (paper presented at the American Real Estate Society Annual Meeting, Lake Tahoe, Nevada, March 1996).

20. General Accounting Office, *Information on Changes in FHA's New Single-Family Appraisal Process*, GAO/RCED-97-176 (July 1997), p. 70.

Many of the bills that favor statutory eligibility criteria for compensation would probably lead to more awards for more property owners than is now the case because the criteria that the bills propose are broader than the constitutional criteria that the courts employ. But although the proposals address certain issues related to fairness, they raise a number of others as well. First, people who sold their property before the statutory system was in place would not be compensated under the proposals, even though a prior government restriction caused them to realize an actual loss in value (as opposed to an unrealized loss) that would have satisfied the statutory criterion. Second, under some of the proposals, the current owners of some properties could be overcompensated.

Those fairness-related problems crop up because property values change to reflect the incidence or threat of restrictions on the way owners may use their land. For example, the significant risk that a new government regulation would be put in place might reduce the price that recent purchasers of a property must pay. That reduction would actually be a loss incurred by the prior owners, who bought the property long before the potential for that regulation's imposition existed or was recognized. As discussed above, the various property rights bills propose that eligible property owners receive as compensation the difference in the value of their property without the restriction and the value of their property with it. That compensation would be appropriate for owners who bought the property before the regulation giving rise to the restriction was ever contemplated. But it would exceed the losses experienced by more recent buyers, who might have paid a reduced price for the property that reflected current or future government restrictions.

An obvious approach to keep some property owners from receiving a compensation windfall is to consider the restrictions that owners should reasonably have expected at the time they purchased their property. In essence, that kind of criterion amounts to an exception from eligibility for compensation; in other words, owners that lack a reasonable, investment-backed expectation of using their property in a way that the government has prohibited will not be eligible for compensation. As noted in Chapter 2, the consideration of property owners' expectations is also an aspect of the courts' constitutional takings jurisprudence.

Reasonable, Investment-Backed Expectations and the Property Rights Proposals

In *Lucas v. South Carolina Coastal Council*, the Supreme Court argued that property rights depend in part on "the understanding of our citizens regarding the content of, and the State's power over, the 'bundle of rights' that they acquire when they obtain title to property."²¹ Thus, to some extent, property owners who acquired land after the passage of the Clean Water Act, the Endangered Species Act, or the Surface Mining Control and Reclamation Act should have considered the effect of those laws on the uses and value of their property. The courts frequently dismiss takings claims involving recently purchased land on the grounds that the new owner lacks a reasonable, investment-backed expectation of using a property in a way that is restricted because he or she should have been aware at the time of purchase of the likelihood of government restrictions.²² The logic behind those dismissals is that property owners cannot suffer the loss of a property right that was not among the bundle of rights they acquired when they obtained title to their property.

The possible role that reasonable, investment-backed expectations might play in the proposals to establish a statutory compensation system is unclear. The proposals' eligibility criteria do not explicitly mention such expectations. Nevertheless, records of the discussions about how some of the proposals would operate show clearly that some Members of Congress assumed that such an inquiry would continue to play a role. For example, a test related to investment-backed expectations does not appear in the language of one bill, and yet the committee report on the bill discusses its contribution to determining property owners' eligibility for compensation.²³ The consideration of reasonable, investment-backed expectations may be implicit in many of the proposals because the ability to bring a claim under the statutory com-

21. 505 U.S. 1003, 1027 (1992).

22. Letter from Robert Meltz, Congressional Research Service, to Senator Dianne Feinstein, May 6, 1996, p. 3.

23. See Senate Committee on the Judiciary, *The Omnibus Property Rights Act of 1995—S. 605*, S. Rpt. 104-239 (March 1, 1996), p. 32.

pensation regimes presumes that the property owner would have a legal claim to the rights at issue. For property owners, a legitimate claim that a regulatory action had taken their right might require a reasonable, investment-backed expectation of exercising that right. Lacking such an expectation, owners might not possess the right that they claimed to have lost.

The Advantages and Disadvantages of Considering Expectations

The process of considering reasonable, investment-backed expectations in a compensation claim has aspects that may run counter to the goals of property rights proponents. For one thing, such considerations would make it more difficult and more complicated to assess an owner's eligibility for compensation. Fairness might require that the courts (or an agency's administrative process) sort out both the risks that the property owner should have reasonably expected at the time of purchase and new risks that could not have been anticipated. In addition, difficult questions might arise concerning the reasonable, investment-backed expectations of those who inherited property or received it as a gift. Paying close attention to property owners' expectations also implies that many owners who were adversely affected by regulatory programs that were established before they bought their properties might not be eligible for compensation—for example, people who purchased their property since the early 1970s, when federal regulatory programs dealing with wetlands and endangered species protection began.

Some people would argue that it was unfair to deny a property owner compensation simply because the person knew, at the time of purchase, that the property was possibly subject to regulation. Purchasing a property almost always entails certain risks, including that of future regulation. Suggesting that people who accepted a risk of regulation when they acquired a property should then be ineligible for compensation might essentially nullify the takings clause. Consider the following two examples.

Suppose a person bought a piece of property with the understanding that its use might be restricted on the basis of an existing regulatory program—a fact

reflected in the price—and at some later time the property was subjected to a restriction. In that scenario, the purchaser of the property took a risk of known proportions and lost. Because the owner voluntarily accepted the risk that use of the property might be restricted, it would be difficult for him or her to argue for compensation on the grounds that later the restriction was, in fact, implemented.

In contrast, suppose a person bought a piece of land with the understanding that its use might be restricted on the basis of an existing regulatory program—a fact reflected in the price—and at some later time the existing regulatory program was replaced with a far stricter one. The use of the property has now been curtailed on the basis of the new, stricter regulatory program, whose enactment the owner could not have anticipated. Because the owner did not voluntarily accept the risk of the restrictions on use that are associated with the new program, he or she would have an argument on which to base a claim for compensation. Although the owner voluntarily accepted the risks associated with the initial regulatory program, those associated with the second were imposed without the owner's having a choice. The argument that he or she knew at the time of purchase that the property's use might be restricted and would therefore be ineligible for compensation does not necessarily hold in that scenario because the risk of restrictions on use changed following the purchase of the property. Distinguishing between such cases in practice might be difficult.

The Nuisance Exception to Compensation

The right to use private property in any way that the owner chooses is not an absolute right. The government's police power allows it to prohibit certain uses of property without necessarily triggering the constitutional requirement for compensation—especially if the prohibited activities pose unacceptable threats to public health, safety, or welfare. In addition, the Supreme Court has stated that actions by the government that abate a nuisance do not trigger the requirement. That holding by the Court is sometimes referred to as the nuisance exception.

Although the concept of nuisance can be somewhat vague, the law recognizes two general categories: private and public nuisances. A private nuisance is an unreasonable interference with a person's right to use and enjoy land. A public nuisance is an unreasonable interference with a right that is common to the general public. Some categories of conduct are so uniformly regarded as unreasonable that courts and legislatures have declared them to be a nuisance as a matter of law. Those actions are sometimes called *per se* nuisances. But for many allegations of nuisance, a court must decide them on a case-by-case basis. To do so, the court applies a balancing test to the particular facts of the case, a process sometimes called determination of a nuisance in fact.

The courts have interpreted the nuisance exception as allowing the government to regulate land use, even in cases in which the threat to public health, safety, or welfare may be modest or indirect.²⁴ But recent signs hint that the courts may be starting to define more narrowly the range of actions that are exempt from compensation. In 1992 in *Lucas v. South Carolina Coastal Council*, the Supreme Court held that where a government restriction eliminated all or nearly all of the economic uses of a property, the government had to compensate the property owner unless the restriction was already evident—that is, unless the restriction was implied in the principles of the state's law of property and nuisance and the government's action simply made the restriction concrete.

Yet despite that decision, the courts still grant considerable latitude to the government to regulate land use without compensating property owners. In the more common situation in which a property retains at least some of its value following a regulatory action, the courts' takings analysis expands beyond the issue of nuisance. In those instances, the courts perform a multifaceted balancing test to determine whether an action constitutes a taking (see Chapter 2). Part of that analysis may include considering whether a regulation abates a nuisance, but the analysis is not necessarily limited to that issue.

Many advocates of the proposed statutory compensation regimes do not approve of what they consider to be an overly broad interpretation of "police power" that the courts use as the basis for exempting the government from compensating property owners. For example, some property owners argue that the government should not be allowed to restrict property use to protect endangered species' habitats without compensating owners, because that purpose overreaches what some property owners perceive to be the government's legitimate use of the police power to protect human health and safety. Consequently, many of the proposals contain a narrower exemption to the proposed statutory requirement for compensation than the one that the courts now use.

In some versions of that requirement, the exemption would apply to actions by the government that addressed an imminent threat to human health or safety. The narrower exemption might require the government to pay property owners in situations in which it severely regulated land use to protect wildlife. As previously noted, other versions adopt aspects of the Supreme Court's inquiry into restrictions that are implied in a state's common law of nuisance and principles of property law. For instance, under some of the proposals, if a property owner satisfied the reduction-in-value criterion, the government would be required to pay compensation unless it could show that its regulatory action abated a nuisance as defined by the common law of the state in which the regulatory action occurred.²⁵

Substituting a nuisance exception for the multifaceted balancing tests that the courts often employ to exempt the government from compensating property owners might increase the frequency of successful compensation claims stemming from federal regulatory actions. Opinions about the desirability of that change—which might restrict the government's ability to regulate without having to pay compensation—may differ according to whether people believe that the use of the nuisance exception in the proposals can "properly" distinguish between regulations they perceive as

24. John A. Humbach, "Evolving Thresholds of Nuisance and the Takings Clause," *Journal of Environmental Law*, vol. 18 (1992), p. 9.

25. A state's common law is a system of jurisprudence based on court decisions rather than legislative statutes. In the property rights proposals that have been put forth, nuisance would be defined according to the common law of the relevant state, that is, according to the past decisions of state courts.

"harm-preventing" and those they perceive as "benefit-conferring." If a regulatory action prevented a physical harm to the public, most people would argue that no compensation was necessary. In contrast, if a regulatory action conferred public benefits by burdening a property owner, most people would argue that compensation was proper. The problem is that the distinction between "harm-preventing" or "benefit-conferring" regulations is, in the words of Supreme Court Justice Antonin Scalia, "often in the eye of the beholder."²⁶ And it is not obvious that the proposals' reliance on the legal concept of nuisance will clarify that distinction to the satisfaction of people who are concerned about property rights.

In practice, an exception to the compensation requirement based on the nuisance doctrine might be difficult to implement. Most of the legislative proposals that include such an exception are not precise about the concept of nuisance that they would use (whether public, or private, or both). Every state has statutes that declare certain activities to be nuisances. Are legislative declarations of that kind sufficient to rule out compensation for certain regulatory activities? Many of the property rights proposals refer to the property law and nuisance doctrines of the states to define the exception for federal actions. Conceivably, federal regulatory actions that fell under the nuisance exception in one state and required no compensation might require compensation in another state.

Another problem with using the nuisance doctrine as the basis for determining when government actions do not require compensation is the difficulty involved in identifying an activity as a nuisance. That determination, in many cases, is the result of a trial. Activities that are a nuisance as a matter of law—*per se* nuisances—are more obvious but also likely to be rarer. In many instances, whether an activity is judged to be a nuisance will not be known until the court has applied a balancing test to the particular facts of the case. That assessment usually occurs after the activity has begun and some harm is apparent. But under some of the proposed compensation systems, the government would be arguing that a proposed activity was a nuisance before it had begun. In those cases, the

determination of whether the activity was, in fact, a nuisance would be necessarily more speculative than in cases in which the activity was already occurring. Under such circumstances, the government might have difficulty convincing a court that a proposed activity that it sought to prevent constituted a nuisance. Alternatively, the property owner might have difficulty proving to a court that the activity that the government was regulating was *not* a nuisance. That problem would introduce another element of uncertainty and controversy into the proposed compensation regimes.

Expanding the Bundle of Rights Eligible for Compensation

Some of the legislative proposals discussed here would broaden the array of property rights involved in compensation claims. For example, some proposals specifically include contracts and other security interests in property (such as liens) as well as certain water rights among the types of "property" whose taking might be eligible for compensation. Applying the kind of analysis usually reserved for a regulatory taking claim to those types of property interests would be a significant departure from current practice, even though those interests are considered forms of property. The Fifth Amendment protects such interests from uncompensated takings, but takings claims involving them are rarely successful because claimants have and use alternative remedies.

Today, the courts rarely find that a government's action modifying a contract or another security interest in a property is a taking. More often, the courts evaluate such actions and may award compensation on the basis of a breach of contract. (In other words, if a government's action is prompted by public policy considerations and results in a breach of a contract to which the government is a party, the government may be "liable in breach" but is rarely found to have caused a taking.)²⁷ The effect of a statutory compensation

26. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1024 (1992).

27. Robert Meltz, *When the United States Takes Property: Legal Principles*, CRS Report for Congress LTR 91-339A (Congressional Research Service, March 22, 1991), pp. 68-69; and memo from the American Law Division, Congressional Research Service, to Senator Dianne Feinstein, August 15, 1997, p. 5.

program that included contract rights would largely depend on whether the courts maintained their traditional position on that issue.

Currently, the right to use water is recognized as a form of property and is protected by the Fifth Amendment. But because of water's unique qualities as a public resource, the courts grant considerable leeway to regulatory actions that affect water use and rarely identify such actions as takings.²⁸ How the proposals would affect water rights depends on whether the courts retain their traditional "deference" toward such restrictions. If the current approaches of the courts gave way to the strict application of the proposals' statutory eligibility criteria, actions by the government involving water rights would be likely to generate successful takings claims. For example, compensation claims might result from federal actions to maintain minimum in-stream flows and groundwater levels that preserve aquatic habitat as required by the Endangered Species Act. Such actions might reduce the amount of water that farmers and ranchers would be permitted to remove for their purposes. That kind of limitation could prompt claims that the government's action took the water rights of those farmers and ranchers.

Another reason that government actions affecting water rights are seldom judged to be takings is that federal involvement with water is often contractual in nature and provisions written into the contracts allow the government's contractual obligations to change under certain circumstances.²⁹ For example, water projects operated by the federal government may contract with privately owned irrigation districts to provide water that in turn is funneled to farmers and urban users.³⁰ Those contracts usually contain clauses that allow the government to unilaterally modify the contract under certain circumstances. In addition, the parties to the contract may adopt new provisions as contracts expire. For those reasons, the government often has wide latitude to modify water deliveries without breaking its contractual agreement.

Changes in contract terms may be motivated by a number of public policy considerations. At this point, whether or how the various property rights proposals might alter the government's contractual obligations or create the potential for successful claims for compensation in the area of water rights is unclear.

28. See Joseph L. Sax, "The Constitution, Property Rights and the Future of Water Law," *University of Colorado Law Review*, vol. 61 (1990), pp. 257-281; and Barton H. Thompson Jr., "Regulation of Water Use and Takings: A Growing Battlefield" (mimeo, Natural Resources Law Center, University of Colorado School of Law, 1994).

29. Pamela Baldwin, *Water Rights Language in H.R. 925 as Passed by the House*, CRS Memorandum (Congressional Research Service, April 11, 1995), p. 4.

30. For an extended discussion, see Congressional Budget Office, *Water Use Conflicts in the West: Implications of Reforming the Bureau of Reclamation's Water Supply Policies* (August 1997).

Chapter Four

Increasing Access to Federal Courts and Encouraging Settlements

The current approach to regulatory takings is often criticized for the high costs and long delays that may accompany a claimant's pursuit of a final decision. Property owners find it difficult to get a federal court to agree to decide their claim "on the merits." (In the judicial system, the merits of the claim are the various elements that qualify plaintiffs for the legal relief they are seeking—in contrast to procedural, jurisdictional issues that may preclude relief.) Property owners have particular difficulty in getting federal courts to hear claims for compensation against state or local governments. And if a property owner wishes to overturn the decision of a federal agency and pursue compensation from the federal government, those objectives may require two separate cases tried in separate courts. The high cost of litigation, long delays in the judicial process, and generally poor chances of success deter some property owners from filing takings claims, especially small ones. Another effect of those deterrents, critics argue, is to reduce the incentives for federal agencies to settle claims on terms that are favorable to property owners.

Supporters of property rights legislation have proposed a number of changes to assuage those concerns:

- o They would relax the requirements necessary to establish the ripeness of takings claims against the federal government, making it easier for property owners to get their claims heard by the courts.

- o They would relax the requirements for establishing the ripeness of takings claims against state and local governments that are filed in federal courts. The proposals would also limit the discretion of federal courts to abstain from deciding such cases.
- o They would establish an administrative appeals process for certain federal regulatory programs, which might allow some disputes to be resolved at the agency level before property owners resorted to legal measures.
- o They would adopt a variety of mechanisms to encourage property owners and the federal government to settle compensation claims without resorting to a trial. The most significant of those mechanisms would allow property owners to force the federal government to submit to binding arbitration of their claims.

Easing Ripeness Requirements

Because procedural and jurisdictional issues seem to slow progress toward a decision on the merits of a claim, especially in the context of takings, some legislative proposals would reduce the hurdles that property owners might face when they tried to get their claims heard. Some of the bills' proposed changes affecting claims filed against the federal government

could be part of legislation that established a new right to sue the government for regulatory compensation. Other legislative proposals would reduce some of the procedural barriers that can prevent takings claims filed against state and local governments from being heard in federal courts.

Easing Requirements for Claims Against the Federal Government

Some of the legislative proposals that the 105th Congress considered included specific language that would have modified the steps required to establish ripeness in Fifth Amendment takings cases.¹ As noted in Chapter 2, if a court determines that a case is not ripe, it will dismiss the lawsuit without even considering the merits of the claim. The property owner must then either go through whatever steps are necessary to establish ripeness or abandon the suit. For example, the current ripeness doctrine may require property owners to apply multiple times for a permit for a particular land use. It may also demand that they exhaust the available administrative remedies for challenging the agency's denial of the permit. Establishing ripeness is more of a problem for claims against state or local governments that are filed in federal courts than for claims against the federal government (see the next section).

Most of the legislative proposals that address ripeness would continue to require a final decision by the regulatory agency about the permissible uses of the property at issue before a court heard the case. But under certain circumstances, the proposals would limit the number of applications necessary to establish those uses to a single, "meaningful" application. Moreover, the property owner would be required to pursue either one administrative appeal or a waiver of an adverse decision by a regulatory agency. Under some proposals, property owners would not be required to pursue an appeal or waiver at all if their success in obtaining one was "reasonably unlikely." That standard is considerably less restrictive than the "futility" standard that courts now apply when deciding whether a claim-

ant must pursue an appeal or waiver to establish ripeness. With the new "reasonably unlikely" standard, property owners would find it easier to submit takings claims without the appeal or waiver step, and courts would be less likely to refuse to hear claims on the grounds that they lacked ripeness.

Other legislative proposals do not directly mention or discuss ripeness. If one of them was enacted, the courts might continue to reject many claims on the basis of the current ripeness standards. Alternatively, if a proposal established a legislatively defined system of regulatory compensation, the courts might develop new ripeness criteria to evaluate compensation claims filed under that regime. For example, under several proposals, an action by an agency that restricted the use of a property and caused a sufficiently large reduction in its value might trigger the compensation requirement. That kind of eligibility criterion might not require a final determination of the remaining uses of the property, which today can be an impediment to getting the courts to hear the claim.

The effect of easing ripeness requirements for claims filed against the federal government is difficult to predict. On the one hand, such changes could reduce the time and expense necessary to bring a claim, although as noted earlier, establishing ripeness is not a substantial barrier for some federal regulatory programs. (One exception might be claims brought under the Endangered Species Act).² On the other hand, relaxing the requirements for ripeness might encourage property owners to file their claims earlier in the regulatory process than they do now, which could require courts to make decisions on the basis of incomplete information. The purpose of the ripeness requirements is to ensure that the courts have enough information to consider and judge claims that are brought before them. The burden of proof in takings cases is on property owners, and if ripeness requirements were made less stringent, property owners might simply be unable to prove their cases, even though they might get an earlier day in court.

Other factors also contribute to uncertainty about the effects of less exacting ripeness requirements. For

1. Robert Meltz, "*Property Rights*" Bills Take a Process Approach: H.R. 992 and H.R. 1534, CRS Report for Congress 97-877A (Congressional Research Service, June 24, 1998), pp. 17-19.

2. Barton H. Thompson Jr., "The Endangered Species Act: A Case Study in Takings and Incentives," *Stanford Law Review*, vol. 49, no. 2 (January 1997).

example, cautious property owners might choose to delay their claims until more of the facts were known. In such situations, relaxed ripeness requirements for federal claims might have little impact. Another issue relates to the authority to legislate a relaxed standard of ripeness. Having the Congress be able to legislate when a case is ready to be heard by the courts could raise questions about the extent to which the legislative branch of government may dictate judicial doctrine.³

Easing Requirements for Claims Against State and Local Governments

The same concerns that have been voiced about the difficulty of getting a federal court to hear a taking claim involving a federal regulatory action also apply to the process of getting a federal court to hear a case involving a state or local government action. Property owners may file takings claims that arise from the actions of a state or local government in a state court by alleging a violation of the state constitution's prohibitions on uncompensated takings. But some property owners choose instead to file claims against a state or local government in the federal courts. In those cases, the owner alleges that property rights guaranteed under the U.S. Constitution are being violated by the state or local government.⁴

Several reasons may prompt an owner to make a claim in federal court rather than at the state level. For example, property owners may expect more favorable treatment of their claim there, or they may have been unable to establish the ripeness of their claim in the state court. In any event, the federal courts hear very few of these claims, tending instead to dismiss them for lack of ripeness or on the basis of the abstention doctrine.

Although establishing the ripeness of a taking claim against a state or local government in a state court may be difficult, establishing ripeness for those claims at the federal level may be harder still. The

reason is that federal courts not only judge the claim against the ripeness criteria used by the federal courts but also may require the property owner to pursue and be denied compensation in the state courts before they will agree to hear the case. Another possibility is that a federal court will simply abstain from deciding the case because to do so would require it to interpret an aspect of a state's law of property that is unclear, or "unsettled." Generally speaking, federal courts are reluctant to do that; consequently, on many occasions they choose to abstain from deciding such cases (see the discussion in Chapter 2).

Some of the proposed legislative measures would reduce barriers that might prevent takings claims against state or local governments from being heard on their merits by federal courts. The proposals for the most part advocate three approaches. First, they would impose the relaxed criteria for ripeness described in the previous section. Second, they would eliminate the requirement that property owners seek compensation in a state court before filing a claim in a federal court. Third, they would establish statutory limits on the discretion of federal courts to abstain from deciding takings claims filed against state or local governments.⁵

Such changes could have a pronounced effect on the litigation of takings claims against those governments. In the first place, as noted above, establishing ripeness for takings claims arising from land-use restrictions at the state or local level may be more difficult than establishing ripeness for similar federal actions. Moreover, some people see state courts as less receptive to takings claims. The legislative proposals would allow property owners to choose between a state or federal court for their claims. Presumably, they would choose the venue they considered most favorable to their position. With the proposed relaxation of ripeness requirements, that venue might well be the federal courts.

Too little is known about the volume of takings litigation in the state courts to reliably forecast the number of those claims that might enter the federal courts as a result of enacting any of the proposals. The effect of the change might be quite small. The

3. Meltz, "Property Rights" Bills, p. 23.

4. That federal cause of legal action was established in the Civil Rights Act of 1871, 42 U.S.C. 1983.

5. Meltz, "Property Rights" Bills, pp. 17-19.

courts would continue to evaluate claims according to the existing federal constitutional takings jurisprudence, which in many cases presents a difficult path for property owners seeking compensation. Thus, even if such claims were heard in federal courts, the prospects of success for property owners would remain poor; combined with the cost and complexity of litigating in a federal court, they might continue to discourage owners from bringing takings claims against state and local governments in federal courts. Nevertheless, if one of the legislative proposals was enacted, the possibility that a property owner might bring a costly federal lawsuit could pressure state and especially local governments to settle property rights disputes out of court.

Modifying the Jurisdiction of Federal Courts

The appropriate court in which to file a suit for property rights infringement against the federal government has been another target for a number of the legislative proposals. As noted in Chapter 2, the U.S. Court of Federal Claims hears most claims that seek compensation for a taking. But if the property owner also wants to invalidate an agency's regulatory action, he or she must file suit in a federal district court. A property owner seeking compensation of more than \$10,000 and arguing "in the alternative" that the action was unlawful must file two separate suits in two separate federal courts. That level of litigation can increase the cost of making a claim and prolong the time required for the claims process—for both the property owner and the government (although it is not clear by how much). And there are additional complications. The U.S. Court of Federal Claims typically postpones hearing a compensation claim until the validity of the regulatory action in question has been determined. The court follows that practice because the U.S. government cannot be held liable for a taking that results from an unlawful action. Moreover, the Court of Federal Claims is sometimes prohibited from deciding a claim when a case based on the same set of operative factors is pending before the district court and

the property owner in that case also seeks compensation.⁶

Some people argue that the government has used the jurisdictional split of the federal courts to thwart takings claims through a tactic they call the "Tucker Act shuffle." (Among other things, as discussed in Chapter 2, the Tucker Act establishes aspects of the jurisdiction of the Court of Federal Claims.) In the federal district court, in which a property owner seeks to reverse an agency's regulatory decision, the government may try to get the action dismissed by arguing that the proper remedy is compensation—which must be pursued in the Court of Federal Claims. In the Court of Federal Claims, in which the property owner seeks to obtain compensation, the government may try to get the action dismissed by arguing that the proper remedy is invalidation of the agency's action—which must be pursued in a federal district court.

Some legislative proposals deal with the so-called Tucker Act shuffle by modifying the jurisdiction of the federal district courts and the Court of Federal Claims to give each court authority to award compensation of any amount and to invalidate the action of an agency. That change in jurisdiction would give property owners the choice of filing their claim in either a federal district court or the Court of Federal Claims. The proposals would also allow a taking claim to move forward in the Court of Federal Claims while the property owner was also pursuing a related case against an agency in a federal district court.

The relative impact of the provisions in proposals that deal with federal courts' jurisdiction is uncertain.⁷ The legislative measures would most likely clarify the appropriate court in which to bring a complaint against the federal government under the takings clause. However, the Congressional Budget Office was unable to determine whether or how often the gov-

6. 28 U.S.C. 1500, 62 Stat. 942. For a discussion of the significance of these restrictions, see Meltz, "*Property Rights*" Bills, pp. 4-6, particularly note 17.

7. Ibid., p. 8. The provisions might raise constitutional problems because they grant the Court of Federal Claims, a court created under Article I of the Constitution (the legislative article), powers that may be reserved for a court created under Article III—the judicial article.

ernment now uses the Tucker Act shuffle and whether it is effective if used.

Encouraging the Settlement of Compensation Claims

As noted earlier, legislative proposals that relaxed the criteria that the courts use to determine eligibility for compensation could increase the number of claims that property owners filed. The volume of claims would rise because the higher probability of success would make more claims worth litigating, even if the overall cost of litigating remained high. When compared with the present system, in which claims for compensation are relatively rare, the total cost of litigation could increase under the various property rights proposals, perhaps significantly.⁸ Yet as long as litigation costs remained high, many small compensation claims would not be worth pursuing unless the eligibility criteria for compensation were dramatically relaxed. That is one reason many of the legislative proposals contain provisions that are designed to reduce the cost of litigation and increase the ability of property owners with small claims to take advantage of the proposed compensation system.

Reducing procedural requirements and adopting potentially less complicated eligibility criteria might lower the cost of deciding compensation claims in court (see Chapter 3). But litigating those claims might still be costly. One way to avoid that expense would be to encourage property owners and the federal government to resolve compensation claims outside of the courts. To that end, many property rights bills include one or more provisions that would:

- o Establish an administrative process that would allow property owners to appeal the decisions of certain agencies that regulate real property without going to court.
- o Encourage parties to use arbitration and other kinds of alternative dispute resolution.

8. The volume of litigation might be reduced if regulatory agencies could be discouraged from making decisions that might result in compensation claims. For a discussion, see Chapters 5 and 6.

- o Give property owners the option of forcing certain federal regulatory agencies to participate in binding arbitration to determine their eligibility for compensation.

Adopting an Administrative Appeals Process

The advantage of an appeals process is its potential for defusing disputes before they become compensation claims. An appeals process might also function as an information conduit between the government and property owners. Through the process, the government might be able to establish the reasonableness of its decision, whereas property owners might be able to establish some measure of the economic effects of the agency's decision. That kind of communication might improve the chances of settlement and avoid costly, time-consuming litigation.

The creation of an administrative appeals process for regulatory programs is quite separable from the other aspects of property rights proposals. In fact, the Army Corps of Engineers has proposed such a process for its wetlands permitting program.⁹ To be effective, both parties in the dispute must view an appeals process as fair, and both must benefit from participating. Otherwise, the parties might prefer to pursue other avenues of resolving their conflict—such as going to court.

Settling Claims Through Alternative Dispute Resolution

Most of the proposals that would establish a statutory compensation system contain language that encourages property owners and the government to settle claims without the time and expense necessary for a trial. Settlement approaches that could accomplish that goal include traditional pretrial negotiations, voluntary arbitration or mediation, or some other form of alternative dispute resolution (ADR).

9. See "Landowners May Get Administrative Appeal for Corps Decisions If Process Is Funded," *Environment Reporter*, vol. 28 (August 8, 1997), pp. 664-665.

Of course, those mechanisms are available to property owners and the government in the present system. In fact, the Administrative Dispute Resolution Act of 1990 encourages agencies to use ADR in disputes that do not involve rulemaking.¹⁰ If agencies do not regularly use those approaches to resolve disputes with property owners, the reason may be that the federal government has little incentive to settle takings claims before trial—because it usually wins such cases. And by refusing to resolve claims before trial, the federal government may maintain the expectation that takings litigation will be both costly and risky. That perception may limit additional claims and help to conserve the government's scarce legal resources.

The sparse use of ADR to resolve takings claims does not mean that agencies are unwilling to reach compromises with property owners who are adversely affected by a regulatory action. Regulatory decisions that result in claims for compensation are the exception rather than the rule. Many regulatory decisions, including the issuance of permits, may involve extensive consultation and negotiation between the government agency and the affected property owners. But once it is apparent that a claim for compensation is unavoidable, the rational strategy for the government is to force a property owner to advance his or her claim to the trial stage.

If less stringent criteria for determining eligibility for compensation were adopted, successful compensation claims would be likely to increase. As a result, the government might be more willing to settle claims to avoid additional legal costs and a possibly undesirable precedent. At the same time, property owners might be more willing to go to court. To avoid those trials, the government would have to be more generous in its negotiations of settlements with property owners.

Under the proposals, the deciding factor in the relative frequency of trials might be the level of uncertainty about their outcomes. The more predictable those outcomes became, the more likely it would be that both parties, through some mechanism, would be able to reach a settlement that was preferable to their expectations of the trial's outcome and the additional

cost and delay.¹¹ If the outcomes of litigation remained uncertain, however, there might be times when both parties would be excessively optimistic about their prospects in court. Unless the settlement mechanisms were effective at dispelling such optimism, the parties might find themselves involved in a trial.¹²

At least initially, the enactment of a statutory compensation system might increase uncertainty about the result of compensation claims decided by the courts. In the present system, the outcome of some individual takings claims can be difficult to predict, but it is clear that the majority will fail. Under the eligibility criteria contained in statutory compensation proposals, a larger share of property owners would potentially qualify for compensation. For that reason, the outcome of particular claims would be more uncertain. In addition, determining how the courts would apply the proposed procedural changes, eligibility criteria, and exceptions might require many years of litigation. Nor is it guaranteed that the system would reach a point at which court decisions were more predictable than they are now.

Because little information is available about the use of ADR in the context of takings claims, inferences about its possible effects must be based on its more general use by the courts. To the extent that such experience applies to takings litigation, significant savings of time or money should not be expected from ADR.

The use of ADR is not a new phenomenon. For over 20 years, a number of federal courts have employed one or more ADR methods to manage their caseloads. In addition, the Civil Justice Reform Act of 1990 established pilot programs and called for studies of the effects of ADR and other reforms on judicial case management, litigation costs, and the time required to close cases. Yet only limited empirical research is available, and it suggests that ADR is less a substitute for trials than a substitute for traditional

11. For a discussion of this phenomenon, see Richard A. Posner, *Economic Analysis of Law*, 4th ed. (Boston: Little, Brown, and Co., 1992), pp. 554-564.

12. That conclusion might not hold if the parties were significantly averse to risk—in other words, if they placed more value on receiving a certain dollar amount than on getting a lottery ticket with the same expected value.

settlements reached by the litigating parties. On the whole, research has not demonstrated that ADR significantly reduces the cost of litigation or the time required to dispose of cases.¹³ ADR is well regarded, however, especially because it affords parties an opportunity to present their case, something that does not usually occur in traditional settlement negotiations.

Perhaps the closest analogy between ADR methods that are currently used by the federal courts and the approach envisioned by some of the legislative proposals on regulatory takings is court-annexed arbitration. Under that approach, the courts encourage or initially require the parties in a dispute to participate in nonbinding arbitration.¹⁴ (The parties, though, are free to reject the decision of the arbitrator and move on to a regular trial.) Some legislative proposals would encourage the use of arbitration but would also stipulate that property owners could not be forced to use an arbitrator.

Much of the empirical research on ADR has focused on the effectiveness of court-annexed arbitration programs. But many of the studies suffer from methodological problems and possibly a self-reporting bias.¹⁵ Arbitration is more expensive than traditional settlement negotiations but less expensive than actual trials. Thus, the effect of arbitration on litigation costs would depend on how often arbitration replaced a trial rather than a traditional settlement. The available research suggests that court-annexed arbitration does not affect the number of trials. It may facilitate settlements by allowing both sides to hear some of each other's evidence, but that benefit must be weighed against the additional cost of the arbitrations. Most studies suggest that ADR offers little savings in litiga-

tion costs or reduction in the time required to close cases.¹⁶

Forcing the Government to Participate in Binding Arbitration

Some of the legislative proposals would create new avenues of recourse for property owners who were affected by certain regulatory programs, including those authorized under section 404 of the Clean Water Act (the wetlands program) and the Endangered Species Act. Under this approach, property owners could choose to submit evidence that the agency's action had reduced the value of their property. The agency would then be required to respond promptly with an offer either to purchase the property or to compensate the owner. If the agency's offer was unacceptable to the property owner, he or she could force the agency into binding arbitration to decide what compensation, if any, was appropriate. Binding arbitration is a trial-like process in which a third party other than a judge or a jury renders a decision that is enforceable in court. Courts may hear appeals from binding arbitration, but they usually limit their review to procedural issues.

Being able to force the federal government to use binding arbitration would offer two benefits to property owners. First, arbitration would probably be less expensive than a trial in a federal court. Second, the government would probably have fewer opportunities to delay a decision on the owner's eligibility for compensation. In reaching a decision, the arbitrator might consider the same eligibility criteria that the proposals set out for the courts. Consequently, if the property owner was likely to qualify for compensation, the government might prefer to settle the claim before the actual arbitration.

Although arbitration might be less expensive than a trial, it could still be costly.¹⁷ Because the arbitrator could apply the same criteria of eligibility for compensation as would the courts, cases could remain

13. James S. Kakalik and others, *An Evaluation of Mediation and Early Neutral Evaluation Under the Civil Justice Reform Act* (Santa Monica, Calif.: RAND, 1996), p. 10; and Donna Stienstra and Thomas E. Willging, *Alternatives to Litigation: Do They Have a Place in the Federal District Courts?* (Washington, D.C.: Federal Judicial Center, 1995), p. 10.

14. Programs vary among districts. In some districts, the parties are encouraged to use arbitration. In others, the default is for cases to go to arbitration, but either party may petition to waive the arbitration requirement.

15. See Robert J. MacCoun and others, "Alternative Dispute Resolution in Trial and Appellate Courts," in D.K. Kagehiro and W.S. Laufer, eds., *Handbook of Psychology and Law* (New York: Springer-Verlag, 1992), p. 103.

16. Ibid., pp. 109-110.

17. Deborah Hensler, "Science in the Court: Is There a Role for Alternative Dispute Resolution?" *Law and Contemporary Problems*, vol. 54, no. 3 (Summer 1991), p. 186.

complex, and considerable evidence and expert opinion might be required. Those factors might limit the reduction in costs, relative to a trial, that arbitration

could achieve. And if the outcome of an arbitration was not predictable, the parties might find it difficult to avoid either arbitration or an actual trial.

Augmenting Requirements for Agency Takings Analyses

A major goal of the property rights proposals examined in this study is to discourage federal agencies from pursuing regulatory actions that impose onerous burdens on property owners. Some legislative proposals would use an analytical requirement to achieve that goal; that is, they would modify an existing requirement that federal agencies evaluate the possible effects of their regulatory actions on property rights before undertaking those actions. Specifically, provisions in the proposals include adopting broader criteria to define what constitutes an action that agencies should avoid, requiring agencies to publish their analyses, and subjecting the analyses to judicial review. This chapter examines using an augmented analysis requirement to change the behavior of regulatory agencies.

Takings Analysis in the Present System

If the government must compensate property owners when it takes their property, it is reasonable that federal agencies should consider, before they act, the possibility that their decisions might cause a taking. A statutory requirement for formally analyzing the potential for a taking as a result of a proposed regulatory action is an extension of similar analytical requirements imposed on government agencies over the past 30 years. For example, a “look-before-you-leap” prin-

ciple is embodied in statutes such as the National Environmental Policy Act of 1969 and the Regulatory Flexibility Act of 1980, which require federal agencies to evaluate how a proposed action might affect the environment or small businesses, respectively. Other analytical requirements are imposed by executive order; for example, one requires that agencies estimate the costs and benefits of major new regulations before they are promulgated.¹

The Basis for Takings Implications Assessments

Executive Order 12630, issued in March 1988, requires executive branch agencies to formally analyze the takings implications of certain actions and to report any significant findings to the Office of Management and Budget.² Those reports are called takings implications assessments, or TIAs. The executive order also instructs the Attorney General to develop guidelines for agencies to use in conducting those analyses. Proposals that would impose a statutory requirement on agencies to consider the property rights

-
1. Executive Order 12866, "Regulatory Planning and Review," *Federal Register*, vol. 58 (September 30, 1993), p. 51735.
 2. Executive Order 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights," *Federal Register*, vol. 53 (March 15, 1988), p. 8859.

implications of their actions build on Executive Order 12630.

The executive order lays out the components of a TIA. The analysis must contain an assessment of the likelihood that the proposed action could cause a taking of private property, a discussion of alternative actions that are less likely to cause a taking but that will still satisfy the agency's obligations for action under the law, and an estimate of the government's liability for compensation should a court find that the proposed action is a taking.³ Yet the actual requirements that the order sets out are relatively modest. For example:

- o The analyses use the current definition of regulatory takings developed by the courts. According to that definition, very few government actions are likely to pose a significant risk of a taking.
- o Agencies are not expected to develop precise estimates of the liability that might arise in a particular case.⁴
- o Agencies prepare the assessments solely for internal use, and the analyses are protected from public disclosure.⁵
- o The requirement is only enforceable within the executive branch. Thus, it creates no legally enforceable duties.

The "actions" that the executive order covers include proposed federal regulations, the application of federal regulations to a specific piece of property, a physical invasion or occupation of private property, or any related policy statements or actions.⁶ Of course,

many government actions regulate the use of private property with little or no chance of causing a taking—for example, the requirements imposed on recreational boaters by the U.S. Coast Guard detailing the minimum safety equipment that they must carry. The Attorney General's guidelines establish a process for exempting from the analysis requirement specific policies or actions that, as a class, have no implications for takings.⁷

Each year federal agencies undertake thousands of actions that could affect property rights or property values. Out of that vast array, the agencies select only a small number for a takings analysis. They achieve that economy of effort in two ways. First, an agency may prepare a "generic" TIA for activities that it engages in repeatedly but that are unlikely to result in takings. Second, some agencies have worked with the Attorney General to develop agency-specific supplemental guidelines that exempt many of their activities from the analysis requirement. For example, the Army Corps of Engineers does not prepare a takings assessment for every application it receives to dredge and fill wetlands. Instead, it prepares an assessment only if it plans to deny the permit or if the property owner rejects the terms of the permit that the Corps is willing to approve. Since the Corps rejects relatively few permits over the course of a year, it prepares few takings assessments.⁸

Conclusions Regarding Takings Analyses

To better understand the issues involved in the preparation of TIAs, the Congressional Budget Office reviewed agency-specific guidelines and several dozen TIAs prepared by the regulatory branch of the Army Corps of Engineers and the Departments of the Interior and of Agriculture. That review generated a number of conclusions.

3. U.S. Attorney General, *Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings* (1988), pp. 21-22.

4. *Ibid.*, p. 16.

5. The confidentiality of takings assessments was upheld in *CIT Group/Equipment Financing, Inc. v. United States*, 24 Cl. Ct. 540 (1991).

6. The definition also includes proposed legislation and comments on proposed legislation. In addition, the order specifies a number of exceptions including eminent domain, law enforcement actions, studies and planning, military and foreign affairs functions, and actions applying to lands held in trust by the United States.

7. U.S. Attorney General, *Guidelines for the Evaluation of Risk*, p. 3.

8. U.S. Attorney General, *Supplementary Guidelines to Evaluate the Risk and Avoid Unanticipated Takings for the Department of the Army's Civil Works Program* (March 23, 1989), Appendix A, p. 4.

One finding from CBO's review is that when preparing TIAs, agencies must use considerable judgment in deciding whether a proposed action might constitute a taking. Indeed, judgment is virtually all they have to rely on in evaluating actions such as proposed legislation, rules, or regulations because the action's effect on particular properties is often uncertain and little legal guidance is available. (As discussed in Chapter 2, the courts typically refuse to consider claims at this point because the claims lack ripeness.) Overwhelmingly, the TIAs that CBO reviewed determined that proposed actions were unlikely to cause a taking of private property. Those outcomes reflect the constitutional takings jurisprudence, under which government actions rarely constitute a taking.

Another broad conclusion that CBO reached is that the agencies rely primarily on only a few arguments to justify their conclusions. For example, agencies often noted that the proposed action would not eliminate all economically viable uses of the entire property—an outcome that, for the courts, sometimes precludes a taking. Agencies also argued either that the proposed action would not impose restrictions on the use of a specific property or that it would not affect a constitutionally protected property interest. In general, the TIAs were relatively short, tended to focus on legal questions, and used qualitative evaluations to reach their conclusions. Since the agencies found so few actions that had the potential to cause a taking, they seldom found it necessary to develop estimates of potential liability or to consider alternative actions in the TIAs.

The current takings analysis requirement has several strengths. It replaces the ad hoc approach that agencies would otherwise use with a more systematic, documented one. At the same time, the process allows for supplemental guidelines that give agencies discretion to concentrate their analytic resources on the activities that are most likely to generate takings claims. Maintaining the confidentiality of the actual reports encourages candor within the agency. In addition, enforcement of the requirement is kept out of the courts, which prevents litigation—that could become protracted—over the minimum acceptable quality of the analyses.

In addition to its strengths, the current takings analysis requirement has several weaknesses. In many

cases, the basis that agencies use to evaluate the consequences of their actions is ambiguous because the takings jurisprudence is unclear. That lack of clarity may create doubts about the conclusions of takings analyses and how the information they provide should be used in an agency's decisionmaking. Moreover, the analyses are not publicly available, and compliance with the requirement is not enforced outside the executive branch. Consequently, the current requirement does little to assuage the public's concerns that agencies may fail to consider the effects of their proposed actions on private property rights.

Proposed Modifications to the Takings Analysis Process

Criticism of the current approach to takings analyses has several themes. Some people claim that the present requirement for analysis is too modest. Those who believe that the courts' present definition of a taking is excessively narrow want agencies to consider and, where possible, avoid a broader set of effects on private property. Some advocates of change contend that protecting the analyses from outside review encourages the impression that agencies do not comply with the executive order—or, at the least, that they have something to hide from those who might bear the costs of regulation. In addition, some people are not convinced that the executive branch enforces the analysis requirement or has the proper incentives to do so.

The Congress in recent years has considered several legislative proposals involving TIAs, and in general, those bills would make three significant changes to the takings analysis process. (Not all proposals would make all of the changes.) The first change would require agencies to use in their analyses the statutory eligibility criteria for compensation that are part of many property rights proposals. The second would make the agencies' written assessments of the implications for takings available to the public and specifically to property owners who were directly affected by an agency's decision. The third change would make the analysis requirement legally enforceable—that is, by the courts. The shift in enforcement would mean that interested parties could use the courts to compel agencies to prepare an adequate analysis

before choosing among actions that could affect the uses and value of private property.

Takings Analyses Based on the Proposed Eligibility Criteria

Some proposals for a new takings analysis requirement are part of larger bills that would create a statutory compensation system with broader eligibility criteria than the courts' constitutional takings jurisprudence (see the discussion in Chapter 3). Under those proposals, agencies would be required to evaluate whether a proposed action might trigger the statutory eligibility criteria for compensation rather than whether the action might violate the takings clause of the Fifth Amendment.

Any requirement for an analysis of possible compensation eligibility under the statutory criteria must address at least three questions. First, what actions by the agency must be evaluated, and when? Second, how should agencies evaluate which exceptions (such as those for health and safety or for nuisance) might apply to the requirement for compensation? Third, how should agencies estimate the reductions in property value that might occur or the compensation that might be required if a proposed action was carried out?

What Actions to Evaluate, and When. Some property rights proposals that include a requirement for assessing potential compensation eligibility stipulate that proposed rules, legislation, or policies that are likely to result in a compensation award must be evaluated before they are implemented. Thus, the volume and nature of the required analyses would depend on the meaning of the word "likely" and on what actions qualified as "compensable." Some versions of the proposals call for assessing the potential for a compensable action on the basis of the takings jurisprudence. Others state that the proposed actions should be evaluated according to legislatively defined criteria for compensation eligibility. Under the statutory criteria, considerably more government actions would have effects that might qualify for compensation. As a result, considerably more analyses could be necessary.

Yet exactly how enactment of any of the various property rights proposals would affect the volume and nature of takings analyses is unclear. One specific source of uncertainty involves the courts' ripeness doctrine. Under the current analysis requirement, agencies have used the doctrine to justify delaying their analysis until a restriction has been applied to a specific property in a way that may have clearly evident consequences for property rights. If agencies can continue to rely on arguments related to ripeness, they can limit the analyses they must perform to the application of regulations to specific properties. If they cannot, more analyses might be necessary.

Applying Exceptions to the Compensation Requirement. Many regulatory actions by an agency are ineligible for compensation under both the constitutional takings jurisprudence and various proposals for changing the current system because they constitute exceptions. The exceptions in the case of the courts' body of law are implicit in the definition of a taking under the Fifth Amendment; in the case of the proposals, the exceptions are explicit in the statutory criteria for eligibility for compensation. Identifying the actions that fall under the rubric of those exceptions is a crucial aspect of performing takings analyses.

Some of the legislative proposals dealing with property rights contain two possible exceptions to the compensation requirement.⁹ The first is an explicit exception for actions that prevent or abate a nuisance. The second is possibly implicit; the exception is really an assumption that if an agency's regulatory restriction does not interfere with an owner's reasonable, investment-backed expectations for the use of the property, no compensation is required. Both exceptions would be difficult to apply in situations in which an agency attempted to analyze the impact of a regulation before it had actually been implemented, because the regulation might affect numerous properties in possibly uncertain ways. Evaluating the takings consequences of a restriction on a particular piece of property is easier, but it can still require considerable time and information.

9. These exceptions are described in greater detail in Chapter 3.

Requiring agencies to evaluate whether their proposed action might abate a nuisance (and thus not trigger compensation eligibility) would present them with a difficult task. As discussed earlier, the courts regard some forms of conduct as a nuisance *per se*, but for other actions, the courts apply a multifactorial balancing test to determine whether an offending use of a property is a nuisance. Generally speaking, a court weighs the gravity of the harm caused by the use against the benefits that the use would generate, and its conclusion often depends on the particular facts of a case. That kind of specificity would make it difficult for an agency to identify a nuisance exception when it was evaluating regulations that had not yet been applied to particular properties. In contrast, if an agency evaluated the implications of a restriction on a specific property, it would have more of the information it required to apply the nuisance balancing test. Despite the increased data, however, performing a balancing test to identify a nuisance before the fact could be subjective in many circumstances.

The courts now use the inquiry into an owner's reasonable, investment-backed expectations to determine whether the property owner had a so-called compensable expectancy for the use of that property that the agency's action restricted or eliminated. Although that inquiry helps to ensure that property owners are appropriately compensated, in many cases it is difficult to carry out.¹⁰ Assessing such expectations would be especially problematic for agencies if the regulatory action at issue was a general regulation that had not yet been put into effect. Reasonable, investment-backed expectations are specific to a particular owner and piece of property. Before the general regulation had become effective and been applied to particular properties, information about its implications for takings would be limited. As a result, agencies might be reduced to making rough generalizations about the investment-backed expectations of large numbers of property owners.

Estimating Reductions in the Value of Property. At present, specific changes in property values receive little attention in most takings cases. Under the consti-

tutional takings jurisprudence, such losses are decisive only when a government's regulatory action eliminates nearly all of a property's value. That approach is also reflected in the way agencies conduct their TIAs (that is, reductions in property values play only a small role). The Attorney General's guidelines emphasize that approach because they stress that any estimates of potential liability are not expected to be precise.

In contrast, for some of the proposed compensation regimes, the extent of any reduction in property value would largely determine whether a property owner was eligible for compensation. If those same compensation criteria were incorporated into the takings assessment process, agencies could be expected to devote more time and resources to estimating the possible reductions in property values that their proposed actions might cause. The question then is, How might agencies estimate those losses and how reliable would those estimates be?

In situations in which agencies were evaluating the effects of a restriction on a specific property, they could use essentially the same techniques that would be used in the trial of an actual compensation claim. That process usually involves gathering expert appraisals of the change in the property's value caused by the government-imposed restriction. The advantages and disadvantages of using that approach to determine eligibility for compensation, which were described in Chapter 3, also apply here. In some instances, appraisals can provide an objective basis for estimating the reductions in value that owners would bear as a result of a regulatory action. But sometimes appraisals of undeveloped land—the kind of property that federal restrictions often affect—are expensive, sensitive to critical assumptions, and subject to vociferous criticism by opposing parties. In addition, appraising large numbers of properties might be prohibitively expensive.

Another approach would be to insert estimates of the cost of a regulation into an economic model that would predict how those costs might change the prices of different kinds of property. Yet the modeling approach has several drawbacks that limit its usefulness. The estimates of regulatory costs that it produces can

10. The advantages and disadvantages of using such an inquiry are discussed in Chapter 3.

be inaccurate.¹¹ In addition, economists often disagree about the appropriate way to model the effects that regulations have on property values in the short run.¹² Even in cases in which the choice of modeling is uncontroversial, the necessary information about responsiveness of the demand and supply of land to prices may simply not exist.¹³ As a result, in many instances the modeling approach might generate illustrative estimates, but in all likelihood those estimates would be highly sensitive to plausible changes in the assumptions that underlay the model.

An alternative approach is to apply statistical techniques to a set of data on the attributes and values of properties. Economists and real estate specialists have developed several methods for estimating the effect of various factors, including changes in regulations, on property values.¹⁴ However, most of those techniques measure the effects of regulatory actions after the fact. That is, they measure how an action changes property values after both the action and the adjustment in value have occurred. To calculate the change, the estimation technique must isolate the effect of the specific regulation from the many other factors that also affect property values. The quality of the resulting estimates depends largely on the strength of the models that are used and the quality of the data

11. Robert W. Hahn, "Regulatory Reform: What Do the Government's Numbers Tell Us?" in Hahn, ed., *Risks, Costs, and Lives Saved: Getting Better Results from Regulation* (New York: Oxford University Press, 1996), pp. 219-224; and Adam B. Jaffe and others, "Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?" *Journal of Economic Literature*, vol. 33 (March 1995), p. 158.
12. See Thomas D. Hopkins, *Regulatory Costs in Profile*, Policy Study No. 132 (St. Louis: Center for the Study of American Business, Washington University, August 1996), p. 27; and Frank S. Arnold, *Economic Analysis of Environmental Policy and Regulation* (New York: John Wiley & Sons, 1995), pp. 161-162.
13. Arnold, *Economic Analysis of Environmental Policy and Regulation*, p. 20.
14. See W.P. Beaton, "The Impact of Regional Land-Use Controls on Property Values: The Case of the New Jersey Pinelands," *Land Economics*, vol. 67, no. 2 (1991), pp. 172-194; W.P. Beaton and M. Pollock, "Economic Impact of Growth Management Policies Surrounding the Chesapeake Bay," *Land Economics*, vol. 68, no. 4 (1992), pp. 434-453; Lawrence Katz and Kenneth T. Rosen, "The Interjurisdictional Effects of Growth Control on Housing Prices," *Journal of Law & Economics*, vol. 30 (April 1987), pp. 149-160; and G.R. Parsons, "The Effect of Coastal Land Use Restrictions on Housing Prices: A Repeat Sale Analysis," *Journal of Environmental Economics and Management*, vol. 22 (1992), pp. 25-37.

available to researchers. Such studies usually require large amounts of data, which tends to make them very costly.

Given the cost and delay associated with the statistical approach, agencies might prefer not to conduct a new study but rather to infer the likely effects of a proposed action from the effects identified in previous studies of similar actions. Essentially, that approach constitutes estimation by analogy, and the reliability of the estimates it produced would depend on the similarity of the proposed action to the one that was studied. It would also depend on the quality of the initial study and whether the two actions applied to essentially the same kind of property. Most studies of that sort evaluate the effects of an action on property values in a relatively small geographic area. It might simply be inappropriate to generalize from those estimates to a larger and perhaps national level.

With additional efforts and resources, regulatory agencies could probably generate better estimates of the changes in property values that were induced by their actions. But those estimates would probably not be precise enough to tell agencies whether their actions would result in compensation payments. A more likely scenario is that agencies would use such studies to reach qualitative conclusions about the risk and magnitude of the compensation awards that their actions might produce.

Publishing Takings Assessments

Proposals to strengthen the existing requirement for takings analyses have two general objectives: to improve agency decisionmaking and to provide public notice of government actions that would limit the uses of privately owned property. An enhanced TIA requirement that included publication of the analyses could serve both of those purposes, but it might not serve them equally well. To be effective as a management tool, the TIAs must be thorough and candid, and candor is more likely to thrive if the process is kept confidential.

Yet confidentiality reduces the Congress's and the general public's insight into the decisionmaking practices of the agency and the expected burdens on

property owners that various actions might impose. Publishing the takings analyses would draw attention to agency decisionmaking and might increase the frequency of lawsuits (as often occurs with the publication of environmental impact statements). Agencies would have a strong incentive to avoid that attention and potential litigation by skewing their analyses in such a way that takings implications were rarely, if ever, found.

Enforcing a Strengthened Takings Analysis Requirement

Shifting the enforcement of the takings analysis requirement from the executive to the judicial branch could accomplish two purposes. First, it might better ensure that agencies complied with the requirement for analysis. (In the present system, courts play no role in enforcement because the existing requirement was established by executive order.) Second, judicial review of the content of the analyses could provide a counterbalance to the incentives that agencies might have to misrepresent the implications of their proposed actions in reports made available to the public.

There is more than one way to define the role that the courts might play in enforcing the takings analysis requirement. For example, the courts' role might be limited to ensuring that a written report was completed at the "appropriate" time in the agency's decisionmaking process. Alternatively, the Congress could direct the courts to ensure that the analyses satisfied certain minimal requirements. In addition, the courts might review the reasonableness of an agency's conclusions. Some proposals require agencies to adopt the regulatory approach that would impose the least burden on property owners while still complying with the law. If such a proposal was enacted, the courts would also be responsible for verifying that agencies had selected the least burdensome approach.

If courts were asked to evaluate the legal adequacy of an assessment or its conclusions, the outcome would depend significantly on the level of scrutiny that the courts employed. Typically, the courts give agencies considerable leeway in exercising their professional judgment. In most instances, the courts evaluate an agency's decision according to the standards set by the Administrative Procedures Act of 1946.¹⁵ Under that law, the courts will set aside a decision only if they find it to be arbitrary or capricious, an abuse of discretion, or otherwise not in accordance with the law. Given that courts have considerable difficulty in deciding most takings cases, it seems unlikely that they would hold agencies to a very stringent standard when making similar determinations of the takings implications of an agency's *proposed* action. However, identifying a taking is a legal judgment that the courts are qualified to make (as opposed to a scientific area in which the agency might have expertise). As a result, courts might be more willing to undertake a thorough review of an agency's takings analyses.

Although relatively rarely, federal courts sometimes set aside an agency's decision if it is based on an analysis that the courts consider inadequate. In certain instances, opponents of a proposed action by an agency may challenge the adequacy of the analysis that the agency is required to perform as a means of delaying or possibly preventing the action from being carried out. That practice has been a feature of the nation's experience with the National Environmental Policy Act, which requires government agencies to prepare environmental impact statements before making decisions that could significantly harm the environment.¹⁶ Twenty-eight years after the law was enacted, its requirements and the adequacy of individual environmental impact statements are still being contested regularly in the courts.

15. 5 U.S.C. 551-559, 701-706, 60 Stat. 237.

16. 42 U.S.C. 4321, 83 Stat. 852. For examples, see Walter A. Rosenbaum, *Environmental Politics and Policy*, 2nd ed. (Washington, D.C.: CQ Press, 1991), p. 282.

Paying Compensation Awards from Agency Budgets

Property rights advocates have clearly demonstrated that one major objective of their efforts and of the legislative proposals they have generated is to discourage federal agencies from making decisions that restrict the use of private property. To do that, some proposals would require agencies to use their own budgets—that is, their annual appropriations—to pay any compensation awards that resulted from their actions. That approach is a significant departure from the present system in which awards for compensation are not usually paid by the agency whose action prompted the award.

The Current System for Paying Compensation Awards

In the current system, when a court awards a property owner compensation for a regulatory taking or when a settlement involving compensation is reached, the money for the award usually comes from a general governmentwide account called the Claims and Judgments Fund. The Congress established the fund through the Automatic Payment of Judgments Act of 1957 (also known as the Supplemental Appropriations Act) to pay compensation for claims and judgments against the United States that is *not otherwise authorized by law*.¹ The Claims and Judgments account is

funded through a permanent, indefinite appropriation. That means that no additional Congressional action is necessary to pay an award from the fund.²

A variety of government actions can generate payments from the Claims and Judgments Fund. (One example is awards of damages for breach-of-contract suits.) In recent years, payments from the fund have averaged roughly \$600 million annually, with considerable fluctuations from year to year. Payment of just compensation resulting from successful regulatory takings claims against the government is a small portion of the fund's annual outlays—with infrequent exceptions.

Payments from the Claims and Judgments Fund show up in accounts of total government spending, but they have little other effect on the federal budget process. Expenditures from the fund fall under the category of mandatory spending, so they do not compete for money with other programs under the discretionary spending caps of the Budget Enforcement Act of 1990. That budgetary approach helps to ensure that compensation awards are paid promptly. However, it does not provide an explicit financial incentive for federal agencies or the Congress to avoid activities that might

identifies the source of payment, the Claims and Judgments Fund is unavailable. But if no existing law has authorized the payment of an award, it may be paid from the Claims and Judgments Fund.

1. 31 U.S.C. 1304, 70 Stat. 678, 694. If some other law authorizes the payment of compensation, the terms of that law determine how, when, and from what source the compensation will be paid. The principle holds even if the funds that the Congress appropriated for that purpose are inadequate to pay the award. In those cases in which a law

2. To ensure that this account is used for its intended purpose, an overseer determines whether the fund is available to pay a given award. For years that role was performed by the General Accounting Office. Effective October 19, 1996, that responsibility was transferred to the Office of Management and Budget, which delegated it to the Treasury Department, pursuant to the General Accounting Office Act of 1996.

result in awards. Opponents of the proposals contend that agencies and the Congress are sensitive to the takings implications of their regulatory activities even without such an incentive. But critics of the current system maintain that a more powerful financial incentive is needed to offset what they see as a tendency for agencies to regulate in ways that are inefficient or unfair. For that reason, they advocate requiring agencies to pay compensation awards from their budgets.

The Rationale for New Incentives

The argument for creating new incentives to encourage federal regulatory agencies to make their decisions on a different basis assumes that those agencies are now making decisions that are inappropriate. That assumption is fiercely debated by those who benefit and those who suffer from regulation. There is evidence that agencies do not always issue rules that satisfy at least one test of economic efficiency—that the marginal benefit of tightening a rule just equal the marginal cost.³ Other data show that the government does not systematically channel its resources toward reducing the greatest risks of morbidity and mortality before it moves on to regulate lesser risks.⁴ Critics of existing regulatory approaches point as well to the inflexibility and complexity of current regulations and the reluctance of agencies to employ more market-oriented approaches to preventing the harms that the regulations seek to avoid.⁵ They also argue that even if federal agencies regulated efficiently, in many instances

those agencies would impose unfair burdens on property owners.

Those arguments have led property rights advocates to propose a new incentive structure for agencies to remedy the alleged unfairness in the distribution of regulatory costs. Thus, agencies whose regulatory actions triggered compensation awards would be required to use their annual appropriations to cover those awards. That requirement would force agencies to divert available funds or to request additional resources from the Congress in the current or subsequent year. Supporters of such an arrangement argue that it would make agencies consider more carefully the effects of their proposed actions on property rights and values. Agencies might then change the mix and level of their regulatory activities to avoid completely or reduce substantially the expected number and size of compensation payments they would have to make. As a result, property owners would encounter less regulation than they do now.

Critics of such proposals argue that making agencies financially responsible for compensation awards could result in too little regulation. Agencies enjoy little or none of the benefits of the regulations they develop and enforce. If they were made financially responsible for a disproportionate share of the costs of regulations, they might have little incentive to enforce those regulations, even if the public benefits of their doing so far exceeded the costs.

3. Robert W. Hahn, "Regulatory Reform: What Do the Government's Numbers Tell Us?" in Hahn, ed., *Risks, Costs, and Lives Saved: Getting Better Results from Regulation* (New York: Oxford University Press, 1996), pp. 219-224.
4. Tammy O. Tengs and John D. Graham, "The Opportunity Costs of Haphazard Social Investments in Life Saving," in Hahn, *Risks, Costs, and Lives Saved*, pp. 167-182.
5. See T.H. Tietenberg, "Uncommon Sense: The Program to Reform Pollution Control Policy," in Leonard W. Weiss and Michael W. Klass, eds., *Regulatory Reform: What Actually Happened?* (Boston: Little, Brown, and Co., 1986), pp. 269-303.

The argument for adopting new incentives to influence the decisions of regulatory agencies presupposes that the Congress and the President do not exercise sufficient control over those decisions with the tools that are currently available. (Those tools include the appointment of agency directors, oversight and reauthorization activities by Congressional committees, clearance of the agencies' appropriation requests by the Office of Management and Budget, and the annual Congressional appropriation process.) The level of Congressional and Presidential control over agency decisions is the subject of a vast literature in political science and other fields. Scholars are divided into two main groups—those who believe that regulatory agencies operate independently of the Congress and the President, and those who disagree with that notion.

The claims of each side in that debate are difficult to test with any rigor.⁶

Among the most powerful tools that the Congress and the President have to influence the decisionmaking of regulatory agencies is the threat of reducing their annual appropriations. But in practice, that threat can be difficult to carry out, which makes the appropriation process an unwieldy tool for changing agency behavior. One reason is that the process is divided among many actors who may disagree about the extent of problems and the appropriate solutions. And although the appropriation process is sometimes used to make policy, that practice can be undesirable because it causes conflicts between authorizing and appropriations committees in the Congress.

The proposals to compensate property owners for regulatory takings by tapping the budget of the agency whose action triggers the award thus raise a number of issues for both the agencies and the Congress. For example, exactly what appropriations would be used for the payments? Do agencies really have the discretion to change their regulatory behavior? And what would be the role of the courts and the Congress under such an approach?

Paying Compensation Awards from Annual Appropriations

The Congress determines the budgets of most federal regulatory agencies through annual appropriation acts. Agencies in their turn have some control over how their annual appropriations should be spent, as long as their decisions are consistent with any relevant laws.⁷

6. Randall L. Calvert, Mark J. Moran, and Barry R. Weingast, "Congressional Influence over Policy Making: The Case of the FTC," in Matthew D. McCubbins and Terry Sullivan, eds., *Congress: Structure and Policy* (New York: Cambridge University Press, 1987), pp. 493-502.

7. See General Accounting Office, Office of the General Counsel, *Principles of Federal Appropriations Law*, 2nd ed., vol. 1 (1991). In making their decisions, agencies typically look at the language of their appropriations, the laws that authorize their activities, committee reports and hearings, decisions of the Comptroller General, and laws governing the use of Congressionally appropriated funds. Disputes regarding an agency's use of its appropriations occasionally land in court. But courts usually grant agencies considerable latitude to

Under some property rights bills, compensation awards would be paid from the budget of the agency whose action triggered the award. But what is meant by "agency budget"? Two general possibilities are the appropriation that funds the specific regulatory program that caused the compensation award and the appropriations of the agency as a whole. In some cases, using either source of funding to pay compensation would lead to the same outcome; in others, the outcomes could be very different.

What Appropriations Would Be Used for Compensation Payments?

A targeted approach to compensation would make a particular regulatory program entirely responsible for the possible financial implications of its decisions. That kind of approach would also make it more likely that the agency's funds would be inadequate to pay for all of the compensation awarded—because it would limit the appropriations available for compensating property owners. For example, the General Accounting Office estimated that pending takings claims involving the Army Corps of Engineers' wetlands permitting program at one point alleged more than \$300 million in damages.⁸ The annual budget of that program, which regulates wetlands under the Clean Water Act, is approximately \$100 million. If the courts awarded compensation that was even a sizable fraction of the alleged damages (recognizing that the damages sought typically far exceed those that might possibly be awarded and that payment of the awards would be spread over several years), the Corps' regulatory program could not pay all of the outstanding awards it owed without requesting additional funds from the Congress.

Adopting a more general approach would mean viewing the "agency budget" as the appropriation for the organization as a whole rather than for a specific regulatory program. That framework would increase the appropriations available to pay compensation and

perform their duties, including the way they administer their limited appropriations.

8. General Accounting Office, *Clean Water Act: Private Property Claims as a Result of the Section 404 Program*, GAO/RCED-93-176FS (August 1993), p. 18.

make it more likely that agencies would be able to pay more awards. (In the case of the Corps of Engineers, the appropriation for all civilian programs exceeds \$3 billion. Most of it goes to maintain or improve waterways and shorelines.) The disadvantage of using the more general approach is that the diversion of funds to pay outstanding awards could affect many unrelated programs. In that case, the program generating the compensation awards would not bear the full financial cost of its decisions. The Congress may be reluctant to penalize the many other activities of a large, diverse agency for the decisions of a single program office.

Limits on the Use of Agency Appropriations

The language of the appropriation itself may be a sizable constraint on how agency appropriations can be used to compensate property owners. The more general the language, the more likely it would be that those funds could be used to pay outstanding awards. Some appropriation language is quite broad—for example, when a lump sum is appropriated for general program administration—and funds of that sort would be the most likely sources for compensation payments. Other appropriations, however, are highly restrictive—for example, when the Congress appropriates a specific sum for a particular activity or to acquire specific items within a certain period. Those funds are less likely to be available to pay compensation awards.

One factor that could affect an agency's ability to pay outstanding awards under some proposals is the extent of its authority to reprogram or transfer its appropriations. Agencies are free to reprogram unobligated funds—that is, to shift funds from one budget category to another *within* an appropriation—as long as the expenditures fall within the scope of the appropriation's general purpose and do not violate any specific limitation. Whether the payment of compensation was within the general purpose of an appropriation would depend on the appropriation's specific language.

An agency's ability to transfer funds might be another deciding factor in whether it could pay for compensation awards. In contrast to reprogramming, a transfer shifts budget authority from one appropri-

ation to another. An agency may have multiple appropriations, each funding a different program. If awards for compensation exceeded the resources available from the annual appropriation that funded a particular regulatory program, agencies might wish to transfer money from another appropriation to fund the awards.

Today, all such transfers must be authorized by the Congress. Some of the legislative proposals to adopt a new regulatory compensation system would grant agencies the authority to transfer funds between appropriations to pay outstanding compensation awards. On the one hand, that kind of flexibility would make it easier to pay awards. On the other, it would make it easier to divert funds from programs that were not directly responsible for the actions that prompted the compensation.

What would happen if outstanding awards exceeded the available funds? Participants in the debate over changing the takings claims regime have different views of whether the volume of successful claims under the various property rights proposals would ever produce such an outcome. For the purposes of the discussion in this section, the Congressional Budget Office assumed that some claims for compensation made under the proposed statutory compensation regimes would be successful and would become payable from agencies' appropriations. (The possible size of those successful claims is the subject of Chapter 7.)

If compensation awards exceeded available funds, agencies might face conflicting Congressional directives. The language of their appropriation might direct them to use the funds to carry out specific statutory responsibilities, such as regulation, but the Congress might direct them to pay outstanding regulatory compensation claims as well. What is an agency legally required to do when it faces competing statutory obligations and has insufficient funds to meet them simultaneously? The answer is, it depends.

A review of the law governing appropriations is beyond the scope of this study, but some general points are helpful.⁹ First, an agency's expenditures must be consistent with its authorizing legislation and

9. General Accounting Office, *Principles of Federal Appropriations Law*, p. 2-36.

the language of its appropriation. Sometimes the language and the directives of the two conflict. That raises the second point. The Congress can always repeal prior legislation (such as the law that authorizes a federal regulatory program), but the courts prefer that it be done explicitly rather than implicitly. When the judiciary confronts a question regarding two laws that conflict, courts will attempt to interpret the laws "harmoniously" wherever possible. Third, when two statutes are irreconcilably in conflict, the more recent statute, as the later expression of the Congress's will in the matter, generally governs.

Agencies confronted with compensation payments would go through a series of steps to liquidate those claims. First, the agency might exhaust the appropriation that the Congress explicitly specified as a source of compensation payments. Next, the agency would have to determine what, if any, other funds were available to pay any remaining awards. Whether other funds were available would depend on the exact language of the compensation statute and the appropriation act. After identifying any additional sources of funds, the agency would pay judgments from the unobligated funds in that account—thereby reducing the money available for the other activities that the account pays for. If outstanding awards still remained after all available appropriations had been obligated, the agency would have to request additional funds from the Congress. (See the later discussion on the role of the Congress.) So-called judgment creditors who received no compensation that year would nevertheless maintain their rights to compensation, which would be paid from the next year's appropriation (if available). Under some of the legislative proposals, creditors would be entitled to compound interest on the unpaid award.

In sum, if outstanding compensation awards and the cost of meeting an agency's statutory obligations exceeded the agency's available funds, something would have to give. Agencies cannot spend more than the Congress appropriates for them. They would either have to reduce some of the activities that they were legally responsible for undertaking—for example, protecting the environment—or defer the payment of outstanding compensation awards. Indeed, some circumstances might require agencies to do both. Those responses demand a certain level of flexibility on the agency's part. Whether agencies have sufficient

discretion to change their behavior is a matter of contention.

Could Agencies Change Their Regulatory Behavior?

If agencies were largely free to choose among a variety of options in implementing regulatory legislation, a new financial incentive could have a dramatic effect on an agency's decisions. But if those decisions were for the most part beyond their control—perhaps because they were dictated by the Congress or the courts—even strong incentives could not be expected to have much of an impact. *Can* agencies change their behavior? How much flexibility do they have in regard to their regulatory responsibilities?

The Extent of Agency Discretion

The alleged need for an incentive mechanism to change agencies' regulatory behavior supposes shortcomings in the factors that currently motivate agencies. One school of thought suggests that agencies regulate according to the broadest possible interpretation of the law—in order to maximize their prestige and power. Another sees agencies as vulnerable to the influence of certain interest groups that use legal and other pressures to encourage more aggressive implementation and enforcement than would otherwise be the case. A competing viewpoint casts agencies as specialized organizations that have been established to pursue a narrow set of goals; within that framework, according to this perspective, agencies try to maximize social welfare. They are limited in their ability to do so, however, by the Congress, which writes the laws they enforce and determines their budgets. Consequently, agencies may have few nonregulatory options available to them to meet the statutory goals.

In general, regulatory agencies enjoy significant but not unlimited discretion to interpret, implement, and enforce the laws under their jurisdiction. So it may be reasonable to expect that agencies would try to adapt to the new financial incentives that some of the legislative proposals for change in the takings system

would put into place. What may be unreasonable is to believe that agencies enjoy sufficient foresight or discretion to avoid all actions that might trigger awards of compensation.

The degree of regulatory flexibility available to an agency depends in large measure on the law that the agency is enforcing. The Congress often legislates in broad terms, leaving the details of implementing the law to an agency with expertise in the field. Agencies thus flesh out the statutory frameworks laid out by the Congress by promulgating rules and regulations. Depending on how the Congress writes a law, agencies may enjoy broad discretion to develop the regulatory program or none at all. A law may precisely define the duties of the responsible agency, or it may allow the agency considerable latitude in doing so. In the latter case, an agency will enjoy more flexibility in drafting regulations and enforcing the law—which in turn would allow it to adjust its actions in ways that could reduce the likelihood of successful compensation claims. But the level of discretion available to agencies to change their regulatory behavior and thus avoid compensation awards must be evaluated on a case-by-case basis.

Other factors also affect an agency's flexibility in carrying out its regulatory responsibilities. The law authorizing a regulatory program may itself stipulate the process of writing regulations, but more general procedural requirements established by the Administrative Procedures Act of 1946 may also come into play.¹⁰ That law defines the role of the federal courts in reviewing decisions made by regulatory agencies.

Judicial Review of Agency Decisions

Judicial review of agency actions could constrain the ability of regulatory agencies to change their behavior in response to the incentives contained in the various property rights proposals. If agencies attempted to modify their regulations and enforcement practices, the courts in all likelihood would be asked by people interested in maintaining the status quo to decide whether those changes were consistent with underlying law. Such judicial review may limit the discretion of

the agency. The courts usually defer to the agency's expertise if technical issues are involved in the matter under review, unless the agency has clearly ignored or misinterpreted information concerning the Congress's intent regarding the law that authorized the regulation. Courts are reluctant to substitute their interpretation of a law for that of the agency unless the agency's interpretation is clearly unreasonable. In general, the court is unlikely to overturn an agency's regulatory action unless the court finds it to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.

Yet despite significant judicial deference to the agencies' judgments and decisions, the courts in many instances have overturned the actions of regulatory agencies.¹¹ Even more numerous are cases in which an interested party sues the government to at least delay an agency's regulatory action, regardless of whether the suit has any prospect of succeeding. Two factors contribute to that kind of litigation. The first is that regulatory legislation frequently contains provisions allowing so-called citizen suits. Many environmental laws, including the Clean Water Act and the Endangered Species Act, contain such provisions, and people have often used them to force changes in regulatory programs. The second factor is the statutory deadlines—which require the completion of certain regulatory actions by set dates—that are part of some regulatory laws. Those deadlines give the courts something concrete to enforce and can strengthen the bargaining position of organizations that are willing to sue to enforce them.

Concerns about potential litigation tend to make agencies cautious in the regulatory process. The possibility of legal action, such as judicial review, serves to limit the discretion of agencies in their implementation of statutes. Agencies may also be reluctant to change their regulatory enforcement because interested parties could use the courts to scrutinize an agency's rationale for a change in its regulations, which might "raise the bar" in terms of what the agency had to justify. As a result, the threat of legal action might hin-

11. Lettie M. Wenner, "Environmental Policy in the Courts," in Norman J. Vig and Michael E. Kraft, eds., *Environmental Policy in the 1990s*, 2nd ed. (Washington, D.C.: CQ Press, 1994), pp. 145-164; and Walter A. Rosenbaum, *Environmental Politics and Policy*, 2nd ed. (Washington, D.C.: CQ Press, 1991), pp. 92-96.

der agencies from changing their regulatory behavior in response to the incentives found in some of the proposed property rights bills.

The Role of the Congress

As the earlier discussion makes clear, the Congress would be a key player in the payment of compensation under the various proposals for establishing a statutory compensation system. If the resulting compensation awards were large relative to an agency's funding, the agency would probably turn to the Congress for a supplemental appropriation or an increase in its appropriation for the following year. The Congress would then have to decide whether to divert funds from other spending priorities or to insist that the compensation be paid from the agency's existing resources. In the latter case, the payment of some compensation awards could be delayed—and under some of the proposals, the awards would grow as they accrued compound interest.

Although the Congress might have few immediate options when an agency first requested more money, it could take steps to avoid such difficult decisions in subsequent years. For example, it could limit the funds available in the future to pay new compensation awards, which might deter litigation by property owners and reduce the volume of awards in the longer run. Yet that kind of approach would also undermine the purposes of a statutory compensation system. As an alternative, the Congress could instruct agencies to change their regulatory practices to reduce the likelihood of large awards. But that solution has a drawback as well: it would require a consensus about how those programs should be changed, and that agreement might be difficult to secure. Moreover, such changes might reduce the protection or benefits to the public that the regulatory program had previously afforded.

Under many of the property rights proposals, the Congress would not exercise direct control over the number of compensation awards that arose. Rather, the generation of awards in a statutory compensation system would be a function of the eligibility criteria that were chosen, the response of regulatory agencies to the new financial incentives they would face, the

statutory obligations for which agencies are legally responsible, and the propensity of property owners to sue for compensation. What the Congress could control through the annual appropriation process would be the number of awards that were actually paid in any year. Thus, although the process that generated compensation awards would in many ways be automatic, the process that liquidated them would require Congressional action.

The effect of the incentive systems envisioned in some property rights proposals would depend on how the Congress reacted to the system over a period of several years. As noted earlier, when two statutes conflict and cannot be reconciled, the more recent statute, as the later expression of the Congress's intentions, governs. Under a statutory compensation regime, an agency's appropriation would usually be the most recent law. Thus, an appropriation, and any restrictions on its use, might prevail over the legislation that established the statutory regime. If an appropriation was written to preclude the payment of compensation awards, then those funds would not be available for that purpose.

The rule that the Congress's latest statute prevails has important consequences for the operation of an incentive system based on the annual appropriation process. The continued operation of such a system would hinge significantly on the willingness of the appropriations committees to allow agencies' budgets to be used for compensation payments. In any year, the committees could write the appropriation to try to protect specific programs by earmarking funds solely for their use or limiting the funds available to pay compensation awards. Another option for the appropriators would be to attempt to change the underlying law or its enforcement, but that approach entails several procedural hurdles.

The impact on the federal budget of a statutory compensation system could become a real concern if awards in the aggregate were significant in size and effectively translated into outlays. If compensation awards were small, the regulatory agencies might be able to absorb them with little or no effect on the overall budget. Moreover, even if aggregate compensation awards were large, the Congress would always retain its discretion to limit the appropriations available to

pay them. At the same time, the Congress might be hard-pressed to deny the funding required to pay claims after property owners had already established their legal eligibility for compensation—especially

since those outstanding claims accrue compound interest and remain federal obligations until the Congress resolves them.

Estimating the Cost of Expanding Eligibility for Compensation

What change in the number and cost of compensation awards would result from adopting less stringent eligibility criteria for compensating property owners for property rights infringement? That question is perhaps the most contentious issue of the property rights controversy. Supporters of proposals to change the current system for handling regulatory takings claims argue that actual compensation payments would be small because agencies would avoid actions that could result in awards. A further limitation on the payments would be the Congress's power to control them through the annual appropriation process. Critics of the proposals, however, contend that agencies should not or could not adjust their behavior to offset a large increase in compensation claims and that less rigorous eligibility criteria would prompt many spurious claims.

The debate over several regulatory takings bills introduced in the 104th Congress included various estimates of the likely change in the number of compensation awards that would result if the proposals were adopted. Those estimates varied widely, from essentially no increase in awards in some cases to dramatic increases in others.¹ For example, the Office of Management and Budget suggested that one proposal

would increase compensation payments by \$28 billion over seven years.² However, the agency provided no detailed support for that estimate.

Estimating the magnitude of the potential change in compensation awards is difficult, for two reasons. The first is that the data necessary to infer the number of property owners who might qualify for compensation—a key variable in the calculation—are not readily available. The second is that many pivotal assumptions must be made to derive the estimates, and those assumptions are subject to considerable disagreement.

Such problems are not unique to the area of regulatory takings. In many instances, when analysts estimate the costs of a new program before it is put into place, they do so on the basis of less-than-ideal information, and they almost always rely on simplifying assumptions to predict the program's effects. The difference is one of degree. Without knowing the distribution of regulatory effects—the number of property owners who would suffer losses and the extent of their losses—it is hard to quantify the relationship between changes in the criteria for eligibility for compensation and the number of property owners who would then qualify. That level of uncertainty increases the importance of the assumptions that are made. And in

1. See, for example, Jonathan H. Adler, *Property Rights, Regulatory Takings, and Environmental Protection* (Washington, D.C.: Competitive Enterprise Institute, April 1996), pp. 15-18; and Jon H. Goldstein and William D. Watson, "Property Rights, Regulatory Takings, and Compensation: Implications for Environmental Protection," *Contemporary Economic Policy*, vol. 15 (October 1997), pp. 32-42.

2. Statement of Alice M. Rivlin, Director, Office of Management and Budget, in U.S. Senate, *Private Property Rights and Environmental Laws*, hearings before the Senate Committee on Environment and Public Works, S. Hrg. 104-299 (July 12, 1995), p. 134.

the context of property rights proposals, little agreement exists over what assumptions are reasonable. For those reasons, the Congressional Budget Office's earlier estimates of such proposals introduced in the 104th Congress did not include the long-run cost of compensation payments under the proposals because CBO could identify no sound basis for making such calculations.³ This study reiterates CBO's conclusion from that earlier cost-estimating work.

Calculating the Change in Compensation Awards

Estimating changes in the cost of compensation requires several steps. The exercise begins by defining a set of property owners. It moves on to calculate what proportion of them would qualify for compensation under the courts' constitutional takings jurisprudence and what proportion would qualify under the statutory eligibility criteria proposed in various property rights bills. The number of property owners who do not now qualify for compensation but who would qualify under the new criteria determines the change in the number of awards. If sufficient information was available about the extent of each owner's losses, one could also estimate the change in the total dollar value of those awards.

An Illustration of the Estimation Problem

Figure 4 illustrates the type of computation described above. The horizontal axes in the two panels depict in percentage terms the possible reductions in property value that an owner might suffer as a result of a regulatory program's prohibitions. The vertical axes represent the number of properties whose value would decline by a given amount in percentage terms. The curves in the figure illustrate hypothetical distributions of reductions in property values caused by a hypothetical regulatory program. According to those curves,

the regulatory program would have little effect on property values in most instances. But in some cases the losses would be much greater, and in a few cases, nearly total.

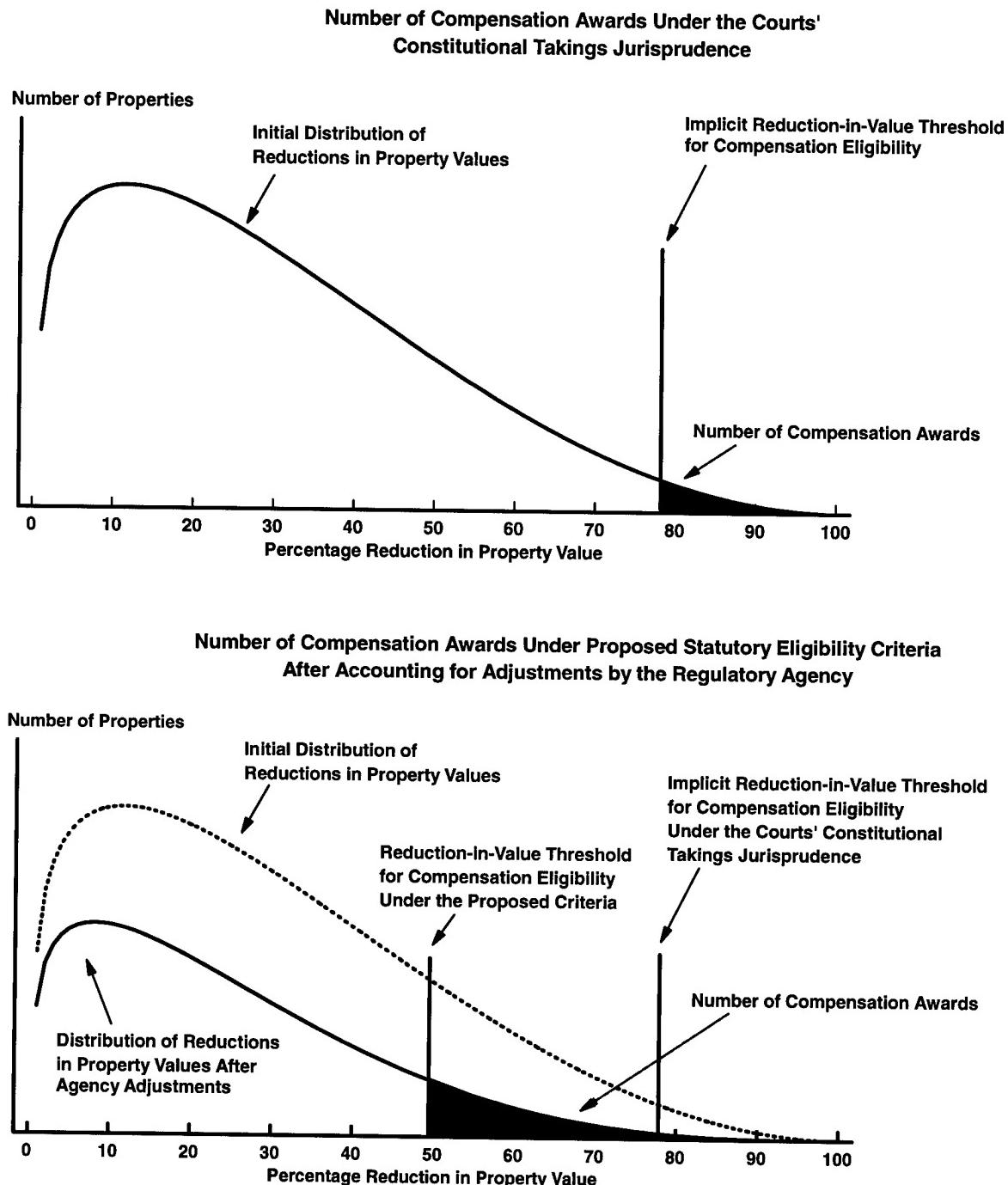
Figure 4 also incorporates an assumption that CBO made to simplify the illustration—namely, that the current doctrine of regulatory takings can be translated into a simple reduction-in-value threshold of 80 percent. In other words, any property owner who suffered a loss in property value of 80 percent or more would be eligible for compensation. However, CBO's assumption in the illustration ignores the fact that the courts weigh losses in the property's value as only one of several factors that they consider in takings cases (see Chapter 2). Thus, the shaded area under the curve and to the right of the threshold in the top panel represents the number of property owners who would qualify for compensation in a system in which reductions in property value alone determined eligibility for an award.

What would be the effect of adopting a new criterion for determining property owners' eligibility for compensation? Suppose that under the new criterion, an owner of property whose value declined by 50 percent or more would qualify for compensation (see the top curve in the bottom panel of Figure 4). Holding all other things constant (including the behavior of the regulatory agency), the new, less stringent eligibility criterion would significantly increase the number of compensation awards.

Now suppose, however, that agencies could respond to the increased risk that their actions might trigger compensation awards because they would have to pay for those awards from their budgets. As a result, agencies might change their regulatory approach or reduce the intensity of their regulatory activities, or both. The outcome could be a change in the distribution of regulatory effects, which is illustrated by the lower curve in the figure's bottom panel. As drawn, the curve indicates fewer owners whose property has dropped in value and smaller losses in percentage terms. Those reductions would tend to shrink the number of property owners who were eligible for compensation, as illustrated by the shaded area under the lower curve and to the right of the new 50 percent reduction-in-value threshold.

3. See United States Senate, *The Omnibus Property Rights Act of 1995*, S. Rpt. 104-239 (March 1, 1996), p. 40.

Figure 4.
Illustrative Comparison of Compensation Awards Under the Courts' Jurisprudence and Under Proposed Statutory Eligibility Criteria



SOURCE: Congressional Budget Office.

What would be the net effect on the number of compensation awards of adopting the less stringent eligibility criteria? In Figure 4, it is the difference between the shaded area in the top panel and the shaded area in the bottom one. The shaded area in the bottom panel is larger than that in the top, so the answer to the question is that the number of compensation awards would increase. But note that drawing the bottom panel of Figure 4 to reflect an even bigger response to the new criteria by the agency would produce the opposite result—that is, a decline in the number of compensation awards.⁴

Problems with the Calculation Method

The preceding illustrations describe some of the many factors that should be part of any estimate of how proposals would change the volume of compensation awards. But they also reveal why such estimates are so difficult to make. A primary reason for that difficulty is that for most regulatory programs, very little is known about the existing distribution of owners who suffer reductions in the value of their property because of regulatory actions (the shape of the curve in the top panel of Figure 4). The change in that distribution that would result from the agency's adjusting its regulatory approach and level of activity in response to new incentives contained in proposals is even less certain.

A second difficulty in estimating the volume of compensation awards is that the courts' takings jurisprudence does not translate into a single eligibility criterion based on reduction in value—in reality, the basis for the courts' decisions is multifaceted and sometimes ambiguous. To a slightly lesser degree, that statement holds true for the proposed statutory compensation regimes. For those reasons, it is difficult to determine exactly how the various property rights proposals would change the eligibility criteria for compensation. Without explicit, comparable criteria for eligibility and reliable measures of the distribution of property value reductions caused by federal regulations, estimating the number of property owners who

would become eligible for compensation under the proposed statutory regimes is largely a subjective exercise.

The Data Problem. Theory can suggest whether a government's policy might increase or decrease property values, but empirical research is usually required to determine the magnitude of those changes. Although some information is available about the effects that certain federal programs have had on property values, very little is known for other programs. A reliable estimate of the number of property owners who would qualify for compensation under the proposed statutory eligibility criteria would require detailed data about the pattern of changes in property values that might occur. As the bottom panel of Figure 4 illustrates, even if the average effect of a regulation was quite small, for some properties, the effect would be large enough to trigger the proposed statutory compensation requirement.

Some of the data that are critical to a credible estimate of compensation claims under the proposed statutory regimes are generally unavailable, which further complicates estimates of the cost of a proposal. Many federal programs do not prohibit an activity but instead require that a property owner obtain a permit before undertaking it. The most likely beneficiaries of relaxing the eligibility criteria for regulatory compensation would be property owners whose permits were denied or who withdrew their applications because they were unlikely to obtain a permit on terms that were acceptable to them. But a review of permit applications would miss property owners who had never applied because they considered their prospects of obtaining an acceptable permit too poor. Many of those owners might also benefit from the relaxed eligibility criteria, but because they do not identify themselves and are not included in the regulatory data, their number is unknown.

Yet even if the existing distribution of regulatory effects was known, that information would not be sufficient to reliably compute the change in compensation awards that would result from adopting eligibility criteria for regulatory compensation claims that were easier to satisfy than those that the courts apply under the constitutional standards. Calculating the change also requires an estimate of how regulatory effects

4. An even larger agency response would push the curve depicting the distribution of property value reductions below and to the left of the curve shown.

would be distributed *after* agencies had responded to the new financial incentives that some of the proposals would create. Those distributions cannot be estimated with any certainty. Supporters and opponents of property rights proposals have very different conjectures about whether agencies could anticipate and avoid compensation awards (see the discussion in Chapter 6).

Uncertain Eligibility Criteria. Calculating the change in compensation awards that would result from adopting new eligibility criteria requires another key piece of data: the number of property owners who do not qualify under the existing criteria but who would qualify under the new ones. Identifying those people is easier when it is clear where one set of eligibility criteria for compensation ends and another begins. That kind of clarity is lacking in the constitutional takings jurisprudence and the criteria that have been proposed in the various pieces of legislation—for two reasons. First, it is hard to identify property owners who qualify for compensation under the existing criteria without conducting a thorough, property-specific analysis of each claim. Second, although the criteria proposed in some of the property rights bills set out an explicit reduction-in-value test, they include exceptions—such as the one for nuisances—that may also dictate a case-by-case analysis.

Making Qualitative Predictions

Given the problems with data and uncertain eligibility criteria noted above, is it at least possible to determine whether the number of compensation awards would increase or decrease? The relaxed criteria for eligibility, together with efforts to reduce the cost of and delays in deciding claims, suggest that more property owners would file a claim for regulatory compensation if one of the proposals was enacted and more claims would be successful. However, if awards were to be paid out of agency budgets, concerns about paying for them could reduce the number of decisions by the agencies that were likely to generate claims to begin with. Thus, the number of regulatory actions that reduced property values would decline, but a higher proportion of them would satisfy the eligibility criteria for compensation. The change in the amount of compensation would depend on which effect was stronger—

the change in the agency's regulatory decisions or the change in the eligibility criteria.

Little theoretical basis exists to support general arguments about which of those two effects is likely to be stronger and therefore whether compensation awards would decrease or increase under the property rights proposals. A more likely scenario is that the relative size of agencies' and property owners' responses would vary from program to program. Three factors are crucial: an agency's ability to anticipate those of its actions that would require compensation, an agency's ability to avoid such actions, and the extent of the change in eligibility criteria that was proposed.

The effectiveness of the incentive system proposed for regulatory agencies would depend on the agencies' ability to recognize which of their actions were likely to result in compensation awards before those actions were undertaken. That capacity, in turn, rests on the clarity of the eligibility criteria and the relationship between the agency's decisions and property values. For some of their actions, agencies would probably be unable to develop precise estimates of the risk that those actions posed for generating compensation awards. Instead, agencies could be expected to use rules of thumb that would provide them with a substantial margin of error.

Even assuming that agencies could readily identify whether their proposed actions would be likely to lead to compensation awards, actually avoiding the payments would require yet another capability: the discretion to pursue a different course of action. Whether they can do so rests with the Congress. As discussed in Chapter 6, the amount of discretion that an agency enjoys varies according to the language of the laws that authorize its activities. Some agencies enjoy considerable discretion; for others, the Congress and the courts limit their flexibility.

How property rights proposals affected the number of compensation claims could vary considerably. Relatively small changes in the compensation eligibility criteria would leave most property owners feeling that the chances of their winning compensation had not improved enough to justify pressing for it. In those circumstances, the number of claims would be unlikely to rise by very much. At the same time, the proportion

of claims that were successful would increase only slightly. Regulatory agencies would respond, to the extent they could, by cutting back those of their activities that were most likely to cause awards. If the change in eligibility criteria was modest, an agency might be able to respond enough to mitigate most or all of the increased risk of compensation. That is because the eligibility criteria implied by the courts' takings jurisprudence are quite narrow, and a slight broadening of the criteria would still leave little opportunity for property owners to obtain compensation. Moreover, if an agency enjoyed some regulatory flexibility, it would be likely to have sufficient discretion to avoid actions that caused the greatest harm to property values.

The larger the change in eligibility criteria implied by the proposals, the less likely it would be that agencies could respond well enough to prevent an overall, and perhaps significant, increase in compensation awards. For one thing, the proportion of claims that would qualify for compensation would increase substantially. For another, the much improved prospect of obtaining compensation might convince many more property owners to file claims against the federal government. A third factor is that the more the proposals relaxed the criteria for eligibility, the more likely it would be that agencies could exhaust their discretion to avoid regulatory actions that generated compensation awards.

Estimates of Compensation Awards from the Property Rights Debate

Ideally, an estimate of the change in the number and amount of regulatory compensation awards that could result from enacting statutory eligibility criteria would take into account the behavioral responses of both property owners and regulatory agencies. Yet for the most part, the estimates used in the debates over such proposals do not incorporate those responses. The reasons are clear: little basis exists for quantifying the response of regulatory agencies, and the data necessary to estimate changes in the decisionmaking of property owners are largely unavailable. Instead,

most estimates tend to be calculations of the value of a certain quantity of land. Some of those calculations are more relevant than others.

There are two notable exceptions to the preceding characterization of estimates that merely value property. The first is a simulation of how changes in federal regulatory programs involving wetlands would affect the choices that farmers make about converting wetlands to agricultural uses. The second is an estimate of the changes in property values induced by the passage of legislation in 1977 regulating mining. In both cases, the estimated changes in the value of property stemming from the regulatory actions examined are in the billions of dollars.

Estimates Involving the Federal Regulation of Wetlands

Economic theory suggests that property values will decline in response to regulatory actions that either reduce the profits that are currently being earned on a property or the profit that an owner expects to receive from converting the land to another use in the future. The principal focus of the various regulatory compensation proposals is on federal programs that could hinder property owners from converting their undeveloped land to other uses. A leading example is the Army Corps of Engineers' permitting program for wetlands.

During the debate over various forms of compensation proposals, analysts developed a number of estimates of the government's potential liability under the new compensation regimes. Other calculations that had been prepared in different contexts were also used, sometimes incorrectly, as proxies for the possible compensation costs that might arise from the proposals. Most of the estimates pertaining to the regulation of wetlands calculated the cost of the government's acquiring millions of acres of privately owned land. The debate over takings legislation included four estimates of that sort. Two of them, which were prepared separately by the Congressional Research Service (CRS) and CBO, are quite similar. The other two estimates were prepared by the Council of Economic Advisers (CEA) and differ in some important ways from the CRS and CBO calculations.

Congressional Research Service. The Congressional Research Service attempted to estimate the cost of acquiring privately owned, "high-value" wetlands as defined in H.R. 1330, which was introduced in the 103rd Congress.⁵ CRS used the Fish and Wildlife Service's Priority Protection List as a proxy for the bill's definition of high-value wetlands. The list identifies about 9 million acres of wetlands that are priorities for acquisition with any funds made available from the Land and Water Conservation Fund.⁶

CRS used 1.5 times the average value of farmland as a proxy for the average value of wetlands, attempting to take into account the urban/rural mix of such land. (Most wetlands are in rural areas, where land values are lower, but wetlands are found as well in coastal or metropolitan areas, where land can be many times more valuable.) CRS reported a point estimate of about \$11 billion but cautioned that

the most important lesson from this examination, and a review of other analyses, is not the "bottom line" number that results when a variety of proxy values, multipliers, and assumptions are used to forecast this cost, but that so little of the information that is needed to forecast it with any degree of confidence is currently available.⁷

Congressional Budget Office. The Congressional Budget Office was asked to provide an estimate of potential acquisition costs for H.R. 1330. CBO estimated that the cost of acquiring wetlands on the Fish and Wildlife Service's Priority Protection List would be between \$10 billion and \$15 billion.⁸ Analysts cau-

tioned that those numbers should not be viewed as the budgetary impact of the proposed legislation because the wetlands on the list had already been targeted for acquisition by the federal government. The effect of the bill would be to accelerate those acquisitions to an unknown extent. An additional factor affecting the estimate was that not all owners of the affected wetlands would seek compensation.

Council of Economic Advisers. The Council of Economic Advisers computed two types of estimates.⁹ The first gauged the market value of the stock of privately owned wetlands that had the potential to be converted to agricultural or urban uses. Nine million acres of wetlands with development potential were valued at \$348 billion. Eleven million acres of wetlands that could be converted to agricultural uses were valued at \$9 billion.

The second type of estimate was based on the historical decline in wetlands conversions that has occurred in recent decades. If the entire decline in conversions was attributable to federal regulatory programs, the forgone gains in property values over a decade would be \$28 billion.

Differences Between the Estimates. The first CEA estimate of \$348 billion is more than 20 times larger than the estimates derived by CRS and CBO, which at the most reach only \$15 billion. (The second CEA estimate is discussed later.) That disparity is the result of different assumptions about the number of acres of wetlands that the government would purchase and their purchase price. Analysts at CRS and CBO developed their estimates in the context of legislation that proposed that the federal government acquire the most economically valuable privately owned wetlands. The estimate by CEA assumed that all of the wetlands to be acquired had some potential for being profitably converted to another activity. As a result, the CEA estimate comprised twice as much land (20 million acres versus 9 million) as the CRS and CBO estimates. CEA also assumed that a large portion of those wetlands had development potential, whereas CRS and CBO each assumed that a much smaller share had such potential. That difference is significant

5. Jeffrey Zinn, "Calculating the Cost of Compensating Owners of Class A Wetlands Under Provisions of H.R. 1330," prepared at the request of the House Committee on Merchant Marine and Fisheries (Congressional Research Service, May 20, 1992).

6. The Land and Water Conservation Fund provides money to acquire property for federal parks and wildlife refuges and offers states matching grants for recreation planning and land acquisition. Receipts from Outer Continental Shelf oil leases supply much of the support for the fund.

7. Zinn, "Calculating the Cost of Compensating Owners," p. iii.

8. Letter from Robert Reischauer, Director, Congressional Budget Office, to Gerry E. Studds, Chairman, Subcommittee on Fisheries and Wildlife of the House Committee on Merchant Marine and Fisheries, May 4, 1992.

9. Council of Economic Advisers, "H.R. 3875 and Wetlands Takings: A Conceptual and Empirical Analysis" (draft CEA White Paper, January 16, 1996).

because wetlands with development potential generally cost many times more to acquire than wetlands that might otherwise be converted to less profitable uses such as agriculture.

Why the Estimates Are Not Good Measures of Potential Awards. A number of problems arise in using calculations such as those discussed above as a proxy for the expected change in compensation awards that might result from adopting less restrictive eligibility criteria for compensation claims. First, the estimates do not consider the public sector's ongoing acquisition of privately owned wetlands. Second, relaxing the eligibility criteria for compensation would force the government to purchase only wetlands that an owner could profitably convert to some other use if there were no federal restriction. Conversion would probably occur over many decades. Any estimate of the effect that relaxed eligibility criteria would have on the compensation awards resulting from wetlands regulation should reflect the rate at which profitable conversion opportunities might occur.

The second estimate by CEA attempted to take into account the flow of wetlands conversions over time. However, it did so by assuming that the entire decline in the rate of conversions in recent decades has been the result of federal regulation of wetlands. Federal regulatory programs do not prohibit outright the conversion of privately owned wetlands; in fact, the government regularly allows those developments. Consequently, any estimate of the government's potential compensation costs should assume that the Corps of Engineers would continue to issue permits allowing development. Nevertheless, that assumption should not be taken too far. As discussed previously, a substantial number of property owners may not be applying for permits because they believe that their applications will not be accepted.

A Better Measure of Potential Liability for Wetlands Restrictions. If a wetland cannot be profitably converted to another use, then a government regulation prohibiting its conversion will have little or no effect on its value. If the wetland can be profitably converted to another use, such a restriction may have a significant impact. Yet most estimates of compensation awards make little effort to determine the number of acres of wetlands that property owners could profit-

ably convert to other uses in the absence of regulatory restrictions.

One recent study attempted to isolate the opportunities for profitable conversions that had been affected by particular federal programs.¹⁰ Specifically, the authors investigated the potential effects of a change in the so-called Swampbuster provisions of the Food Security Act of 1985. Under that law, farmers that convert certain protected wetlands to agricultural uses become ineligible to receive some farm program benefits. The 104th Congress considered adopting a narrower definition of protected wetlands that would allow farmers to drain as much as 77 million additional acres of wetlands without losing their benefits. But for how many of those wetlands would drainage be profitable?

Using data on wetlands, soil productivity, conversion costs, and overall economic conditions, the authors of the study estimated that under the narrower definition, about 8 million acres of wetlands would have been converted over the short term—that is, in less than five years. In a separate article, they estimated that the value of those wetlands, once they had been converted to agricultural uses, might increase by as much as \$29 billion.¹¹ In the absence of the Swampbuster restrictions, the market value of those wetlands should reflect at least part of their income potential as farmland. Thus, if the Swampbuster restrictions had been imposed under the economic conditions prevailing in the early to mid-1990s, the value of the wetlands might have declined by a substantial share of that \$29 billion.

If less rigorous eligibility criteria for compensation had been in force, such an action might have resulted in large compensation claims. The sum of \$29 billion is a plausible upper bound on the dollar value of those claims. However, it is not an estimate of the change in compensation because not all reductions in value would lead to awards.

-
10. Roger Claassen and others, "Using GIS to Analyze the Economics of Swampbuster Exemptions" (paper presented at the 12th Annual Meeting of the Association of State Wetland Managers, Washington, D.C., July 9-12, 1996).
 11. See Ralph Heimlich and others, "Recent Evolution of Environmental Policy: Lessons from Wetlands," *Journal of Soil and Water Conservation*, vol. 52, no. 3 (May-June 1997), pp. 157-161.

Estimates Involving Surface Mining Regulations

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) has several provisions that can affect the value of property.¹² The law prohibits mining in unsuitable areas and requires companies that engage in surface mining to restore the original contours of the land at the end of a mine's economic life. In addition, the law created a fund to reclaim abandoned coal mine lands.

The Department of the Interior attempted to estimate the potential changes in property values caused by enactment of SMCRA. The primary focus of that exercise was coal mining. The study found that complying with SMCRA affected the profitability of active mines as well as the prospective returns on investment in potential future mines. In addition, expected compliance costs varied considerably according to the type of mining and geography. Because of the act's restrictions, some existing mines might close, whereas some mining operations that would have otherwise started up in the future might never open. The law also changed the likely order in which new mineral reserves would be exploited. By altering the profitability of some mines and the timing of mines' opening and closing, the law increased the value of some mineral interests while reducing the value of others.

The Interior Department computed rough estimates of the resulting changes in property values from the enactment of SMCRA for existing surface and subsurface coal mines in both the East and the West. It also computed estimates of changes in the value of coal reserves that would be exploited in the future. In total, the study estimated that the law reduced property values by roughly \$11 billion to \$15 billion (in 1994 dollars). Those figures, however, do not reflect the potentially significant *increase* in property values that certain mines and coal reserves would experience because of the act. The closing of some mines increased the value of coal extracted from the remaining mines. And by reducing the supply of certain exploit-

able coal reserves, SMCRA increased the value of reserves that could be exploited in the future.

Illustrations of the Variation in Estimates of Property Value Losses Caused by Wetlands Regulation

This section presents two ways of estimating changes in property values caused by the imposition of federal restrictions on the use of wetlands. The resulting estimates starkly illustrate the tremendous variation stemming from the use of different kinds of data and different assumptions. In fact, the variation is far more important than any of the particular dollar value estimates—the largest estimate is more than 300 times greater than the smallest.

Also of importance is what the illustrations do not do:

- o The illustrations compute the dollar amount of the gains in value that would have occurred if the government had not prevented an assumed amount of wetlands from being converted to other uses. However, the methods make no attempt to identify what proportion of those forgone conversion opportunities would satisfy the eligibility criteria set out in any of the property rights bills. In many instances, the opportunity to convert wetlands to other uses would significantly increase their value, but the extreme variation among properties would complicate the identification of those that might be eligible for compensation.
- o The calculations do not take into account the decisionmaking of property owners. Only a portion of the affected property owners might be willing to press for compensation. At the same time, if the prospects for obtaining compensation were good, some property owners might be tempted to sue even though they had actually suffered very little from federal restrictions.

12. This section is based on Department of the Interior, "Surface Mining Control and Reclamation Act of 1977: Purpose, Examples, and Federal Liability under Title IX of HR 9" (mimeo, 1995).

- o The examples do not incorporate how federal agencies might respond if they were required to pay compensation awards from their budgets.
- o The calculations do not consider the effect of state and local regulations on wetlands conversions. Some conversion opportunities might be precluded by state and local regulations, such as local zoning. As a result, the methods may overestimate the opportunities for conversion.

Considering the Uncertainties

CBO's illustrative estimates highlight two significant sources of uncertainty that affect calculations of this sort. The first is uncertainty over the nature of profitable opportunities for converting wetlands to other uses. One way to gauge those opportunities is to examine recent patterns in conversions. The second source of uncertainty is the degree to which federal regulations regarding wetlands prevent those conversions from occurring. To address that uncertainty, CBO used a number of assumptions about the regulations' restrictiveness.

Why Are Wetlands Being Converted? Most conversions of wetlands have occurred in rural areas, with land being converted to agricultural uses. A clear downward trend in wetlands conversions has been evident over the past several decades. Yet the evidence about recent patterns of conversion is conflicting. Some data indicate that urban development is now the primary source of wetlands conversions. To illustrate the significance of those patterns, CBO considered estimates of reductions in property values under two scenarios: the strong-urban-demand scenario, which is based on data indicating that urban development is now the primary source of wetlands losses; and the weak-urban-demand scenario, which uses data indicating that agriculture continues to be the driving force behind most wetlands conversions.

A change in the pattern of conversions would be consistent with the many changes in policy and in economic conditions that have reduced the attractiveness of converting wetlands into farmland. It suggests as well an increase in the profitability of developing wetlands for urban uses. Such changes dramatically af-

fect estimates of the reductions in property values associated with federal restrictions that prevent conversions. Unimproved land in metropolitan areas is typically worth many times more than otherwise similar land in rural areas. As a result, estimates that assume greater demand for wetlands that have been converted to development-ready property are many times larger than estimates that assume that most wetlands are converted to agricultural uses.

Studies by the Interior Department's Fish and Wildlife Service (FWS) and the Department of Agriculture's Natural Resources Conservation Service (NRCS) have estimated the acreage and the percentage share of wetlands that were converted to agricultural, urban development, and other development uses during different intervals from the mid-1950s to the mid-1990s (see Table 4).¹³ For most of the time for which data are available, wetlands conversions have moved land primarily to the agricultural sector. However, for at least one period, the data conflict. Information compiled by the NRCS suggests that most of the wetlands converted during the 1980s shifted to urban uses.¹⁴ Preliminary data from a draft FWS report do not show such a shift.¹⁵

Using the NRCS data or the latest FWS data on wetlands conversions has both advantages and disadvantages. The advantage of the FWS data is that they can be compared more easily with data from earlier periods. The NRCS data are not exactly comparable with the FWS data, so making comparisons across time is somewhat more difficult. But even though the NRCS data cover an earlier period than the FWS data, they are actually more current. The reason is that the Fish and Wildlife Service staff could not update all of the FWS wetlands maps before computing their latest estimates of wetlands conversions. Instead, for areas

-
- 13. Wetlands can also be created or destroyed by natural processes or converted into other categories of terrain, including ponds. The shares reported above refer only to wetlands converted to one of three categories: agriculture, urban development, or other development.
 - 14. Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-1997*, Agricultural Handbook No. 712 (September 1997).
 - 15. T.E. Dahl, R.D. Young, and M.C. Caldwell, *Status and Trends of Wetlands in the Coterminous United States: Projected Trends, 1985 to 1995, Draft Report* (Department of the Interior, Fish and Wildlife Service, 1997).

Table 4.
Wetlands Converted to Agricultural Uses, Urban Development, and Other Development, 1954-1995

Converted to	Fish and Wildlife Service Data			Department of Agriculture Data ^a 1982-1992
	1954-1974	1974-1983	1985-1995	
Acres Converted per Year (Thousands)^b				
Agricultural Uses	593	235	143	31
Urban Development	54	14	9	89
Other Development ^c	<u>35</u>	<u>168</u>	<u>50</u>	<u>16</u>
Total	683	417	202	136
Percentage of Wetlands Converted				
Agricultural Uses	87	56	70	23
Urban Development	8	3	5	65
Other Development ^c	<u>5</u>	<u>40</u>	<u>25</u>	<u>12</u>
Total	100	100	100	100

SOURCE: Congressional Budget Office based on T.E. Dahl, R.D. Young, and M.C. Caldwell, *Status and Trends of Wetlands in the Coterminous United States: Projected Trends, 1985 to 1995, Draft Report* (Department of the Interior, Fish and Wildlife Service, 1997); and Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-97*, Agricultural Handbook No. 712 (September 1997).

- a. Specifically, data from the Natural Resources Conservation Service.
- b. These numbers do not reflect conversions of agricultural and other lands to wetlands.
- c. For example, silvicultural activities or development outside established urban communities.

with less recent maps, they used projections of previous trends to derive an estimate of the wetlands remaining. If those trends have changed significantly—and there are reasons to think they may have—the FWS staff's projections will be inaccurate.

How Many Wetlands Would Be Converted If Federal Regulations Did Not Exist? Computing the reductions in property values caused by federal restrictions on the conversion of wetlands requires information about the number of acres of wetlands that would be converted in the absence of those restrictions. The rate of wetlands conversions is known to have declined significantly over the past few decades. But how much of that decline is the result of various government-imposed restrictions—such as those of the Army Corps of Engineers' Section 404 permitting program?

There is no easy answer. For example, previous studies of the Corps' wetlands permitting program could not quantify the number of acres of wetlands that the program had protected from conversion.¹⁶

To illustrate the effect of varying assumptions about how federal restrictions on the conversion of wetlands would affect the value of the property, CBO developed two examples that each use a different approach. The first assumes that in the absence of federal restrictions, the rate of wetlands conversions

16. The Office of Technology Assessment and the General Accounting Office reached similar conclusions in their reviews of the Section 404 program. See Office of Technology Assessment, *Wetlands: Their Use and Regulation*, OTA-0-206 (March 1984), pp. 142-144 and 152; and General Accounting Office, *Wetlands: The Corps of Engineers' Administration of the Section 404 Program*, GAO/RCED-88-110 (July 1988), pp. 20-22 and 33-34.

would be slightly higher than the current rate. The second approach does not consider the current rate of wetlands conversions but rather the decline in the rate in recent decades, and it assumes that a certain proportion of that decline is the result of federal restric-

tions. (Box 6 summarizes the assumptions that underlie the estimates.) The reported losses represent the dollar value of wetlands conversion opportunities that did not occur, because they are assumed to be precluded by federal regulation.

Box 6. Assumptions for CBO's Illustrative Estimates

The Congressional Budget Office used the assumptions that appear below to estimate forgone gains in the value of property that might be attributable to the regulation of wetlands.

Property Values

The value of wetlands left in their natural state was assumed to be \$150 per acre. That value is comparable with the work of Ralph Heimlich and his colleagues.¹ The value of wetlands converted to agricultural or other uses was assumed to be \$1,200 per acre, which is also consistent with the value used by the Heimlich team for agricultural land in nonmetropolitan areas. That estimate was based on state-level data on average cropland values collected by the U.S. Department of Agriculture's (USDA's) Economic Research Service.

The value of wetlands that have been converted to urban development uses was assumed to be \$40,000 per acre. The assumption was based on the following calculations. The Urban Land Institute collected data in 30 cities on prices for improved 10,000-square-foot lots suitable for the construction of single-family homes. The average lot value was identified as \$48,000 in 1995. Allowing for "dedications" of land for roads and other uses, one acre of land could accommodate three such lots. Thus, the price per acre would be roughly \$144,000.

Wetlands are not improved lands, so their value should reflect their unimproved state plus the cost of filling the land to make it suitable for development. CBO assumed that the cost of filling a wetland would be about 10 percent of the cost of improved land and that unim-

proved land was worth about half as much as improved land. Those assumptions are consistent with the assumptions used by the Council of Economic Advisers in their estimate.² Making those adjustments would yield an average value of wetlands converted to development of about \$57,000 per acre. To reflect any mitigation costs and to be generally conservative, CBO reduced that value to \$40,000 per acre.

Wetlands Conversion Rates

CBO considered two sources of data for conversion rates. The first was the Fish and Wildlife Service, which has data for three periods: 1954 to 1974, the mid-1970s to the mid-1980s, and the mid-1980s to the mid-1990s. The second source was USDA's data on wetlands for the 1982-1992 period. Conversion rates for different periods—for example, for the mid-1970s to the mid-1980s or from 1954 to 1974—could also have been used. Because conversion rates were significantly higher during those periods, the resulting value of the estimates would have been much higher.

The data from USDA suggest that there may have been a dramatic shift in the share of wetlands converted to urban uses during the 1980s. Fish and Wildlife Service data from the previous decade show that for every acre of wetlands converted to urban uses, 16 acres of wetlands were converted to agricultural ones. But USDA's data for the 1980s and early 1990s indicate that in that period, nearly three acres of wetlands were converted to urban uses for every acre of wetlands converted to agriculture. The most recent data from the Fish and Wildlife Service do not report such a change.

1. See Ralph Heimlich and others, "Recent Evolution of Environmental Policy: Lessons from Wetlands," *Journal of Soil and Water Conservation*, vol. 52, no. 3 (May-June 1997), pp. 157-161.

2. Council of Economic Advisers, "H.R. 3875 and Wetlands Takings: A Conceptual and Empirical Analysis" (draft CEA White Paper, January 16, 1996).

Basing Estimates on the Current Rate of Wetlands Conversions

The first approach assumes that federal restrictions reduce the number of wetlands converted each year by 1 percent, 5 percent, or 10 percent of the current rate of conversions. (In other words, if the restrictions did not exist, the rate of wetlands conversions would be either 1 percent, 5 percent, or 10 percent higher than the current rate.) CBO estimated the reductions in property value for each of those assumed drops in the rate of conversion by using two measures of the current conversion rate to reflect the weak- and strong-urban-demand scenarios described earlier. The weak-urban-demand scenario used the wetlands conversion rates reported by the Fish and Wildlife Service for 1985 to 1995 (see Table 4); the strong-urban-demand scenario used the rates reported by the Natural Resources Conservation Service for 1982 to 1992.

The estimates varied widely, depending on the use to which the wetlands were being put and the conversion rate that federal regulation was assumed to reduce (see Table 5). Under the weak-urban-demand scenario (which assumed that most wetlands were being converted to agricultural uses) and assuming that federal regulations prevented conversions amounting to 1 percent of the current rate (that is, about 2,020 acres per year), the annual reductions in property values would total about \$5.7 million. If federal regulations prevented conversions amounting to 10 percent of the current rate (about 20,200 acres per year), the annual losses would be tenfold higher, or roughly \$57 million.

Assuming that wetlands are converted primarily for use in development in urban areas ratchets up the losses substantially. Under the strong-urban-demand scenario and assuming that federal regulations prevented conversions amounting to 1 percent of the current rate, the annual losses would be about \$36 million. If federal regulations prevented conversions amounting to 10 percent of the current rate, the resulting annual losses would be tenfold higher, or about \$358 million. Note that the highest estimate derived from this approach is more than 60 times larger than the lowest estimate described above (see Table 5).

Table 5.
**Estimated Reductions in Property Values,
by Selected Declines in the Wetlands
Conversion Rate Because of Federal
Restrictions (In thousands of dollars per year)**

Converted to	Property Value Reductions for a Decline in the Conversion Rate of		
	1 Percent	5 Percent	10 Percent
Scenario 1: Weak Urban Demand for Wetlands^a			
Agricultural Uses	1,499	7,495	14,990
Urban Development	3,639	18,194	36,388
Other Development ^b	527	2,636	5,271
Total	5,665	28,325	56,650
Scenario 2: Strong Urban Demand for Wetlands^c			
Agricultural Uses	324	1,622	3,245
Urban Development	35,307	176,536	353,071
Other Development ^b	172	861	1,722
Total	35,804	179,019	358,038

SOURCE: Congressional Budget Office based on T.E. Dahl, R.D. Young, and M.C. Caldwell, *Status and Trends of Wetlands in the Coterminal United States: Projected Trends, 1985 to 1995, Draft Report* (Department of the Interior, Fish and Wildlife Service, 1997); and Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-97*, Agricultural Handbook No. 712 (September 1997).

NOTES: The estimated reductions in property value shown here are actually the forgone gains in value that result from federal restrictions on wetlands conversions.

These illustrative calculations assume the following average values for an acre of land: as wetlands, \$150; land used for agricultural production and other development, \$1,200; and land used for urban development, \$40,000.

- a. Conversion rates for this scenario are based on Fish and Wildlife Service estimates for the 1985-1995 period.
- b. For example, silvicultural activities or development outside established urban communities.
- c. Conversion rates for this scenario are based on Department of Agriculture (specifically, the Natural Resources Conservation Service) estimates for the 1982-1992 period.

Basing Estimates on the Decline in Wetlands Conversions Over Time

The second approach attributes to federal restrictions some portion—either 5 percent, 15 percent, or 25 percent—of the recent decline in the rate of wetlands conversions (see Table 6). CBO estimated the reductions in property values for each of those assumed shares using data on the decline in wetlands conversion rates under the weak- and strong-urban-demand scenarios. For the weak-urban-demand scenario, CBO calculated the decline in conversion rates on the basis of the FWS data for the 1974-1983 and 1985-1995 periods. For the strong-urban-demand scenario, CBO estimated the decline in conversion rates by using the difference in the rates reported by NRCS for the 1982-1992 period and by FWS for the 1974-1983 period. The estimates were then adjusted for the difference in the composition of wetlands conversions across the two data sets.¹⁷

The estimates of reductions in property value derived with this method are larger than those calculated by using the previous approach. CBO found that the smallest losses would occur if agricultural uses were the primary purpose of wetlands conversions and federal regulations were responsible for only 5 percent of the decline in those conversions (about 10,750 acres per year) in recent years. In that case, annual reductions in the value of property would total about \$30 million. If, instead, federal regulations were responsible for a quarter of the decline in wetlands conversions (about 53,750 acres per year) in recent years, the resulting annual losses would be fivefold higher, or almost \$151 million.

Assuming that conversions of wetlands are primarily for use in urban development brings a somewhat different result. If most recent conversions of wetlands were for urban development and federal regulations were responsible for 5 percent of the recent decline in conversions, annual losses would be just

17. The conversion rates reported for agriculture, urban development, and other development in the FWS data for 1974 to 1983 were adjusted to correspond to the same composition of wetlands losses reported in the NRCS data for 1982 to 1992. That corresponds to the assumption that the effect of federal regulations has been to uniformly reduce wetlands conversions to each of those uses.

Table 6.
**Estimated Reductions in Property Values,
by Selected Shares of the Decline in the
Wetlands Conversion Rate That Are
Attributable to Federal Restrictions
(In thousands of dollars per year)**

Converted to	Property Value Reductions for a Share of the Decline in the Conversion Rate of		
	5 Percent	15 Percent	25 Percent
Scenario 1: Weak Urban Demand for Wetlands^a			
Agricultural Uses	7,966	23,899	39,831
Urban Development	19,338	58,014	96,690
Other Development ^b	<u>2,801</u>	<u>8,404</u>	<u>14,007</u>
Total	30,106	90,317	150,528
Scenario 2: Strong Urban Demand for Wetlands^c			
Agricultural Uses	3,354	10,063	16,772
Urban Development	365,022	1,095,066	1,825,109
Other Development ^b	<u>1,780</u>	<u>5,341</u>	<u>8,901</u>
Total	370,157	1,110,470	1,850,783

SOURCE: Congressional Budget Office based on T.E. Dahl, R.D. Young, and M.C. Caldwell, *Status and Trends of Wetlands in the Coterminous United States: Projected Trends, 1985 to 1995, Draft Report* (Department of the Interior, Fish and Wildlife Service, 1997); and Department of Agriculture, Economic Research Service, Natural Resources Conservation Service, *Agricultural Resources and Environmental Indicators, 1996-97*, Agricultural Handbook No. 712 (September 1997).

NOTES: The reductions in property value shown here are actually the forgone gains in value that result from federal restrictions on conversion.

These illustrative calculations assume the following average values for an acre of land: as wetlands, \$150; land used for agricultural production and other development, \$1,200; and land used for urban development, \$40,000.

- a. The decline in conversion rates for this scenario is based on Fish and Wildlife Service estimates for the 1974-1983 and 1985-1995 periods. The estimates for the 1974-1983 period have been modified so that the shares of wetlands converted to agricultural uses, urban development, and other development correspond to those found in the 1985-1995 estimates.
- b. For example, silvicultural activities or development outside established urban communities.
- c. The decline in conversion rates for this scenario is based on Fish and Wildlife Service estimates for the 1974-1983 period and on Department of Agriculture (specifically, the Natural Resources Conservation Service) estimates for the 1982-1992 period. The estimates for the 1974-1983 period have been modified so that the shares of wetlands converted to agricultural uses, urban development, and other development correspond to those found in the 1982-1992 estimates.

over \$370 million. If federal regulations were responsible for 25 percent of the recent decline in conversions, annual losses would be just over \$1.85 billion. Under that approach, the highest estimate of lost gains in property values resulting from federal regulations is again more than 60 times larger than the smallest estimate.

Conclusions from the Examples

In the debate over the various proposals for a statutory compensation system, perhaps the most controversial issue has been the long-run cost of compensating property owners. Lack of data on how certain federal programs affect the value of property, combined with uncertainty about the extent of the reaction of property owners and regulatory agencies, fuels the controversy by making estimates of those costs highly speculative. On the one hand, some of the estimates used in the debate over certain legislative proposals might exaggerate those costs. On the other, some of the more sophisticated estimates of changes in property value induced by federal regulation run into the billions of dollars over a period of several years.

The two approaches illustrated above show just how uncertain such estimates can be, with "bottom lines" that range from less than \$6 million to more than \$1.85 billion—a difference of over 300 times. As noted earlier, the particular dollar value of the esti-

mates is far less important than their wide range, which stems from plausible differences in the assumptions underlying the calculations. Only better information can reduce that kind of uncertainty, but there are limits to the data that are available or that can be collected—particularly information about how property owners, regulatory agencies, and the Congress would respond to the proposals.

Perhaps the most important piece of missing information concerns how the behavior of regulatory agencies might change. Many of the proposals for compensating property owners contain provisions that should mitigate some of the risk that the federal government would be forced to pay very large amounts of money in compensation awards. The primary "safety valve" is the requirement that compensation awards be paid from the appropriations of regulatory agencies. As discussed in the previous chapter, agencies would be likely to respond to the threat of such liability by changing their regulations and enforcement practices, to the extent that the changes were legally possible. At the same time, the Congress could control the volume and source of those payments through the annual appropriation process. Still, knowing with certainty before the fact whether agencies could effectively mitigate the risk of compensation awards is difficult. Moreover, if those awards were considerable, the Congress would then face the unenviable choice of leaving them unpaid or paying them by diverting scarce budgetary resources that fund other government activities.